

## ***Government Agency Comments***

**GA\_1 Submitter Name: Pacific Coast Joint Venture**

**Docket No: FWS-HQ-MB-2013-0070-0117**

**Date Received: 2/3/2014**

Comment: The Pacific Coast Joint Venture (PCJV) is one of 22 habitat joint ventures in North America that facilitates conservation for birds and bird habitat, and works with conservation partners in Alaska, British Columbia, western Washington, western Oregon, northern California and the Hawaiian islands. Based on the long-term PCJV focus on recovery of wetlands and native water birds in Hawaii, the U.S. Management Board of the PCJV concurs with the findings expressed in the April 2013 Draft Environmental Assessment (EA), released by the U.S. Fish and Wildlife Service Division of Migratory Bird Management, and supports the control order for cattle egrets (*Bubulcus ibis*) and barn owls (*Tyto alba*) within the State of Hawaii.

Justification for this need is clearly expressed within the Draft EA and PCJV support for this action reflects the mission and purpose of Joint Venture partnerships both nationally and locally.

At the national level the avian conservation plans under which Joint Ventures operate (*North American Waterfowl Management Plan, U.S. Shorebird Conservation Plan, North American Waterbird Conservation Plan and North American Landbird Conservation Plan*) all identify the need to address common threats to bird species which can include the control of introduced predators. Regionally the step down versions of these national plans, the *U.S. Pacific Islands Regional Shorebird Conservation Plan* and the *Pacific Region Seabird Conservation Plan*, do the same. At the local level, in Hawaii itself, the need for introduced predator control is magnified due to both: 1) the finite nature of island based ecology and 2) the existing federally listed endangerment status for all, but one, endemic Hawaiian bird (*State of the Birds Report, USFWS 2009*).

In addition, seabird species that nest on Hawaiian Islands and migratory bird species seasonally utilizing Hawaiian habitats are also threatened by these introduced avian predators.

Endangered Species Act Recovery Plans for each listed species in Hawaii acknowledges the issue of introduced predator control measures as essential to the longevity and viable recovery of the species.

Also, Hawaii's State Comprehensive Wildlife Conservation Strategy addresses the need to manage introduced predators to retain the only form of land-based native wildlife in the State, their avian

species. From its inception in the State of Hawaii, the PCJV partnership has had a sole priority focus on a Wetlands Initiative so as to benefit native waterfowl and water bird species, thought to be more vulnerable than any other bird groups.

The PCJV Board clearly recognizes the proposed control order is not the sole remedy for recovery of these species but is one of many management tools that should be employed because of the unique management situations and threats in Hawaii.

The PCJV Management Board would like to recognize that the control order is limited to use by wildlife managers only (not the general public) and has a focus on documenting specific areas and birds that are causing problems. We would also encourage that any take of cattle egrets and barn owls follow recognized humane techniques established for birds. The PCJV will continue its important work with numerous partners on wetland creation, protection and enhancement in Hawaii and we are currently updating our Hawaii conservation plan which will help us prioritize our collaborative efforts with a emphasis on habitat work, but also consideration of other management actions, such as this control order and other efforts to minimize impacts by introduced or invasive species. Many different proactive programs will need to be undertaken to ensure the species proliferation of many of Hawaii's endemic birds.

Thank you for this opportunity to comment.

Sincerely,

A handwritten signature in black ink, reading "Holly B. Michael". The signature is fluid and cursive, with the first name "Holly" being more prominent.

Holly B. Michael

*PCJV U.S. Management Board Chair*

**Oregon Department of Fish and Wildlife**

Conservation Policy Coordinator

4034 Fairview Industrial Drive SE, Salem, OR 97301

503-947-6072 | [holly.b.michael@state.or.us](mailto:holly.b.michael@state.or.us)

*Response: Thank you for your comment. We agree. The Environmental Assessment illustrates the need for action and provides the information used to reach this decision. Introduced predators negatively impact native Hawaiian ecosystems and steps must be implemented to control these effects. Native Hawaiian birds are faced with extinction from a variety of threats, and are highly vulnerable to threats due to their small population sizes and restricted geographic ranges. Controlling invasive predators is one tool in a suite of methods that can be used to benefit all native species, including ESA-listed species. This action is consistent with local, national and regional avian management strategies. Activities authorized in this control order will be restricted to wildlife professionals and will focus on problem areas, using humane techniques to alleviate threats in problem areas.*

### ***NonGovernmental and NonProfit Organization Comments***

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**1. NGO\_1 Submitter Name: Arleone Dibbon-Young – Ahupua'a Natives, Molokai**

**Docket No: email to MBHP office    Date Received: 16 January 2014**

Comment: To whom it may concern,

I support the proposed control order for the Barn Owl (*Tyto alba*) and the Cattle Egret (*Bubulcus ibis*) in Hawaii. Although both were introduced with good intentions in the 1950s, the damage these species would have on our native bird populations could not be predicted.

I have found remains of Hawaiian Stilt (*Himantopus mexicanus knudseni*) and Hawaiian Duck (*Anas wyvilliana*), both endangered, in the pellets of Barn Owls and have observed a Barn Owl take and consume an adult Hawaiian Stilt. The largest Cattle Egret rookery on Molokai is halfway between a Department of Hawaiian Homelands endangered waterbird sanctuary and a state waterbird sanctuary, each only a mile away: This location is utilized by approximately 400 egrets and is one of several on the island.

I am hopeful the two photos below will illustrate the urgent need for control of the Barn Owl and Cattle Egret for the conservation and protection of Hawaii's endangered waterbirds.

*Response: Thank you for your comment. We agree. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. The consequences of introducing cattle egrets and barn owls to Hawaii were not anticipated, and now need to be addressed. Thank you for your additional documentation of predation.*

**2. NGO\_2. Submitter Name: American Bird Conservancy**

**Docket No: FWS-HQ-MB-2013-0070-0113**

**Date Received: 2/3/2014**

Public Comments Processing

Attn: FWS-HQ-MB-2013-0070

Division of Policy and Directives Management

US Fish and Wildlife Service

4401 North Fairfax Drive, MS 2042-PDM

Arlington, Virginia 22203-1610 1 February 2014

RE: Control Order for Introduced Migratory Bird Species in Hawai'i (FWS-HQ-MB-2013-0070)

Comment: We wish to submit comments **supporting** the control order for Cattle Egrets (*Bubulcus ibis*) and Barn Owls (*Tyto alba*). This control order will significantly increase the federal and state agencies' ability to effectively protect Hawai'i's native birds.

These introduced species depredate six Hawaiian waterbirds listed as endangered under the Endangered Species Act (ESA) and as many as 40 species of seabirds, including one listed as endangered and one listed as threatened under the ESA. These introduced species are also known to depredate passerine bird nests and adults in other locations, so presumably are negatively impacting Hawai'i's native forest birds as well.

Local, site-specific attempts to control these introduced species have been ineffective. Because of the long time required to secure permits for any site-specific attempts, significant depredation to the nesting seabirds and freshwater birds frequently occurs. This problem is exacerbated in the Northwestern Hawaiian Islands, where the logistics provide a very narrow window for site- and

time-specific control actions before the damage to the native species occurs. Additionally, the fragile nature of these introduced species means that the target individual(s) can be hard to detect and control within the area once the site-specific permit is obtained. The high mobility of these two species also means that new individuals can quickly immigrate into areas with sensitive or endangered birds.

Although these two non-native birds were introduced for pest control, there is no scientific evidence they have been effective.

Additionally, removing individual Barn Owls and Cattle Egrets from sensitive areas will have an insignificant impact on the overall populations of these two species in Hawai'i and any small agriculture benefits they might provide.

The control order requires sufficient education, reporting, and oversight to ensure this removal program is not abused or misused.

Mahalo for the opportunity to comment on this important decision. Aloha –

George E. Wallace, Ph.D. Chris Farmer, Ph.D. [gwallace@abcbirds.org](mailto:gwallace@abcbirds.org) [cfarmer@abcbirds.org](mailto:cfarmer@abcbirds.org)

Vice President, Oceans & Islands Division Science Coordinator,

*Response: Thank you for your comment. We agree. Publication of this Control Order will support efforts by federal and state agencies to protect native Hawaiian birds by enhancing the current, less effective, system of issuing individual permits. The Environmental Assessment illustrates the need for action and provides the information used to reach this decision. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. Introduced predators negatively impact native Hawaiian ecosystems and steps must be implemented to control these effects. Activities authorized in this control order will be restricted to wildlife professionals and will focus on problem areas, using humane techniques to alleviate threats in problem areas.*

**3. NGO\_3 Submitter Name: BIISC**

**Docket No: FWS-HQ-MB-2013-0070-0114    Date Received: 2/3/2014**

January 31, 2014

TO:            Migratory Bird Management,  
U.S. Fish and Wildlife Service,  
911 Northeast 11th Avenue, Portland, OR 97232-4181.

FROM: Springer Kaye, Manager of the Big Island Invasive Species Committee

RE: FWS-HQ-MB-2013-0070; Comments on a proposed rule change to allow the control of Cattle Egrets and Barn Owls in Hawaii.

Comment: The Big Island Invasive Species Committee (BIISC) supports the proposed rule change, allowing control of invasive cattle egrets and barn owls in Hawaii, and offers the following comments.

Cattle egrets are non-native birds, introduced some 60 years ago to control other pests. They have proved ineffective at controlling the pests for which they were introduced, and have proliferated to the point that they have become pests themselves, and predators of protected species. There is no doubt that cattle egret numbers are steadily increasing throughout Hawaii Island.        Cattle egrets roost in wetlands throughout the Hilo area. It is our understanding that populations were routinely controlled in past decades to prevent deadly collisions with aircraft at the Hilo Airport, which is surrounded by wetlands. Control measures may have ended when conflicts with the Migratory Bird Act became clear.

BIISC conducted a small predator study funded by the USFWS in a wetland bordering the Hilo Airport between 2012 and 2013. The four-acre wetland is a roost site for approximately 60 cattle egrets. The wetland provides habitat for the endangered Hawaiian Coot (average population of 30 adults) however fledgling coots had never been documented at the pond during annual surveys by the Hawaii Division of Forestry and Wildlife. BIISC staff and community members set traps to remove mammalian predators from the pond, removing 1 cat, 1 rat, and 48 mongooses during the

summer of 2012. Trapping continued until cats and mongooses were no longer caught in traps or on camera at the site, and throughout the brooding season. Cattle egrets were identified as a known predator of hatchling birds however control options were not available, due to protection afforded by the Migratory Bird Act.

Immediately following the cull of predators, seven hatchlings were observed at the pond, four of which were tracked and survived to adulthood. There were eleven other eggs found, in four clutches, from which hatchlings were never recorded. As small mammal predators were well controlled, cattle egrets are among the most likely predators of the remaining unsuccessful nests. Four recruits per year are unlikely to sustain a population at this pond indefinitely.

In an unrelated study BIISC measured water quality changes in West Hawaii anchialine ponds (habitat for native damselflies and red shrimp) after the removal of invasive mangrove trees. Cattle egrets congregate nightly to roost, in flocks of incredible size. BIISC did not conduct a bird count at this site, however, to give an idea of the scale, individual roosting flocks in the American South range from 1,400-2,600 birds per roost (Tennessee Ornithological Society). Prior to removal of the trees, the ponds were so fouled by bird droppings and ammonia fumes that staff were sickened and would not conduct the work without respirators. Results are preliminary; however phosphorus levels in the 4 ponds decreased by 20-50% over a 6-month period following removal of the invasive trees.

It is our opinion that the Migratory Bird Act was never intended to protect invasive species to the detriment of protected endangered species struggling to survive in their native habitats. We therefore support the USFWS in this proposed rule change.

*Response: Thank you for your comment. We agree. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. Introduced predators negatively impact native Hawaiian ecosystems and steps must be implemented to control these effects. Controlling invasive predators is one tool in a suite of methods that can be used to benefit all native species and native ecosystems. Publication of this Control Order will support efforts by federal and state agencies to protect native Hawaiian birds by enhancing the current, less effective, system of issuing individual permits. The Environmental*

*Assessment illustrates the need for action and provides the information used to reach this decision. Activities authorized in this control order will be restricted to wildlife professionals and will focus on problem areas, using humane techniques to alleviate threats in problem areas. This action is consistent with local, national and regional avian management strategies. Thank you for your additional documentation of predation and its effects on waterbird populations.*

**4. NGO\_4 Submitter Name: Friends of Animals**

**Docket No: FWS-HQ-MB-2013-0070-0115    Date Received: 2/4/2014**

February 3, 2014

VIA ELECTRONIC MAIL AND U.S. MAIL

Dr. George T. Allen

Public Comments Processing, Attention: FWS-HQ-MB-2013-0070

Division of Policy and Directives Management

U.S. Fish and Wildlife Service

4401 North Fairfax Drive, MS 2042-PDM

Arlington, VA 22203-1610

Re: Comments on Control Order for Introduced Migratory Bird Species in Hawaii, FWS-HQ-MB-2013-0070

Dear Dr. George T. Allen:

Comment: Friends of Animals (FoA) submits these comments opposing the proposed Control Order for Introduced Migratory Bird Species in Hawaii ("Proposed Order"). FoA is a non-profit international advocacy organization incorporated in the state of New York since 1957. FoA has nearly 200,000 members worldwide. FoA and its members seek to free animals from cruelty and exploitation around the world, and to promote a respectful view of non-human, free-living and domestic animals.

The Proposed Order would allow numerous agencies to kill cattle egrets (*Bubulcus ibis*) and barn owls (*Tyto alba*) by egg oiling, egg and nest destruction, firearms, trapping, cervical dislocation, and



CO2 asphyxiation. Under the Proposed Order the agencies could conduct these activities, without a permit, anywhere in the state of Hawai'i, the Northwestern Hawaiian Islands, and the unincorporated territory of Midway Atoll.

We urge the U.S. Fish and Wildlife Service (FWS) not to issue the Proposed Order and to consider its legal and ethical obligations, including requirements under the Migratory Bird Treaty Act ("MBTA") and the National Environmental Policy Act ("NEPA"), and the Endangered Species Act (ESA).

### **THE PROPOSED ORDER IS INCONSISTENT WITH THE MIGRATORY BIRD TREATY ACT, CONVENTIONS AND IMPLEMENTING REGULATIONS**

The MBTA, originally passed in 1918, implements the United States' commitment to four bilateral treaties, or conventions, for the protection of migratory birds. 16 U.S.C. §§ 703-712. The conventions protect designated birds and allow for the removal or killing of birds only in specified limited circumstances.

The original treaty upon which the Migratory Bird Treaty Act was passed was the Convention for the Protection of Migratory Birds, signed with Great Britain in 1916 on behalf of Canada for the protection "of the many species of birds that traverse certain parts of the United States and Canada in their annual migration." U.S.-G.B., preamble, T.S. No. 628, preamble (August 16, 1916) (hereinafter "Canadian Convention"). The primary motivation for negotiation of the 1916 treaty and the passage of the Migratory Bird Treaty Act was to stop the "indiscriminate slaughter" and insure the preservation of migratory birds." *Id.*

Next, the United States continued to express a commitment to Migratory Birds and entered into a treaty with Mexico in 1936 (amended in 1972 and 1999) recognizing that "it is right and proper to protect the said migratory birds, whatever may be their origin." Convention Between the United States of America and the United Mexican States for the protection of Migratory Birds and Game Mammals, Feb. 7, 1936, U.S.-Mex. 50 Stat. 1311, 1311 (hereinafter "Mexican Convention"). The Mexican Convention prohibited the killing of migratory insectivorous birds, except when they become injurious to agriculture or constitute plagues.

The convention between the United States and Japan prohibited the taking of the migratory birds or their eggs, except in limited circumstances, such as for purpose of protecting persons and property. U.S.-Tokyo. March 4, 1972, U.S.-Japan, 25 U.S.T. 3329, 3331 (hereinafter “Japanese Convention”). None of the conventions allowed taking birds to study the effect of their removal on other species.

The MBTA provides a comprehensive, uniform system for the protection of Migratory birds from all forms of unauthorized takes. See e.g., 56 Cong. Rec. 7448 (June 6, 1918) (Statement of Rep. Robbins). The MBTA makes it illegal to “pursue, hunt, take, capture, kill, attempt to take, capture, or kill...” any migratory bird or “any part, nest, or egg of any such bird ..., by any means or in any manner”, 16 U.S.C. § 703, except as permitted by valid permit issued pursuant to regulations. The regulations allowing for an exemption from the take prohibition must be compatible with all four conventions. See 16 U.S.C. § 704. Furthermore, in implementing such regulations, the Secretary of Interior shall have “due regard to the zones of temperature and to the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of such birds.” *Id.*

Comment: According to implementing regulations, a depredating order to permit the killing of migratory game birds can only be issued if there is “evidence clearly showing that migratory game birds have accumulated in such numbers in a particular area as to cause or about to cause serious damage to agricultural, horticultural, and fish cultural interests.” 50 C.F.R. § 21.42. Furthermore, certain conditions apply, including: “such birds may only be killed by shooting with a shotgun not larger than No. 10 gauge fired from the shoulder, and only on or over the threatened area or areas;” migratory birds cannot “be wantonly wasted or destroyed;” and “the order shall specify that it is issued as an emergency measure designed to relieve depredations only.” *Id.* These regulations indicate that depredation orders should be limited.

*Response: 50 CFR 21.42 is a different regulation. It is for take of game species, and its provisions do not apply to this regulation. This ruling is authorized under 50 CFR 21.41.*

Comment: Here a depredation order is not compatible with applicable laws and regulations. First of all, there is little, if any, evidence that cattle egrets or barn owls adversely affect public resources. Moreover, the order is not needed for the protection of people, property, or agriculture.

*Response: Regulation and management of barn owls and cattle egrets in the United States is the responsibility of the U.S. Fish and Wildlife Service. The Service operates under many directives. Many are from Congress, such as the National Environmental Policy Act, Migratory Bird Treaty Act, the Endangered Species Act, and the Wild Bird Conservation Act. Others are from the Executive Branch of the U.S. Government, such as Executive Orders or Secretarial Orders. In this case, cattle egrets and barn owls are protected under the Migratory Bird Treaty Act, but the Act also allows for take of protected species when responsible management dictates it is necessary. Killing birds protected under the Migratory Bird Treaty Act is illegal "Unless and except as permitted by regulations made as hereinafter provided in this subchapter" (16 U.S.C. 703(a)). Executive Order 13112 directs federal agencies to control populations of invasive species in a cost-effective and environmentally sound manner in order to minimize the effects of invasive species, including ecological effects.*

*We achieve this primarily through regulations describing depredation and control orders. In most circumstances, a permit is necessary to legally take or possess a species protected by the MBTA. However, for MBTA species subject to control or depredation orders, an individual specifically authorized by the order may take or possess that species without a federal permit, so long as the regulatory requirements and restrictions of the order are complied with.*

*At the time of this writing there are thirteen depredation and control orders authorized under the Migratory Bird Treaty Act. Each order is assigned its own number, starting with 50 CFR Section 21.42, to Section 21.54. Nine of these orders are for a single species, one is for two species, and three are for multiple species. Two of these orders apply only in a specific state, one is for two states, three are for a described region of the United States, and seven authorize take nationwide. Six control orders were created to protect multiple agriculture, aquaculture or horticulture interests; two are for a specific crop or specific type of crop; four are for protection of human health, one is to protect personal property; two are for protection of fish, wildlife, native plants and their habitats, and two allow take to alleviate any type of nuisance. This rule will create a new control order at 50 CFR Section 21.55 authorizing lethal take of two nongame species in a specified geographic region for the protection of threatened and endangered wildlife resources. We did not claim that cattle egrets or barn owls caused harm to humans or agricultural interests, and that is not required for this rule.*

Comment: Next, the order would not be consistent with MBTA's "due regard" directive because the order and accompanying draft environmental assessment fail to take into account or even consider the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of the cattle egret and barn owl.

*Response: Distribution and abundance of global cattle egret and barn owl populations was thoroughly researched in preparing the control order and EA. As noted in the EA, both cattle egrets and barn owls have stable, cosmopolitan distributions with global populations between 5 and 8 million individuals. Cattle egrets and barn owls are both listed as "Species of least concern" by the International Union for the Conservation of Nature (IUCN). The number of cattle egrets and barn owls removed from the Hawaiian Islands as a result of this control order will not have a significant negative impact on global populations of either species.*

*Since publication of the Draft EA, the Service has made direct contact with the continental United States and provinces in Canada where populations of barn owls are locally endangered. The option of live-trapping and relocating barn owls from Hawaii was offered to these areas; as of publication of this final rule, no other locations or agencies have agreed to accept relocated birds.*

Comment: Lastly, the Proposed Order is overly broad and not limited to areas where these birds are known to be harmful nor is it limited in scope to and allows agencies to kill the birds regardless of whether they are found committing or about to commit acts of depredation.

*Response: The evidence of predation is from throughout the Hawaiian archipelago. We have documentation of the effects of barn owls and cattle egrets on the main Hawaiian Islands and in the Northwestern Hawaiian Islands. As described in the EA, this evidence includes collected remains, collected owl pellets, personal observations and photographs obtained with remote cameras.*

*The intent of this Order is to provide a tool to allow removal of individuals and populations which have learned to prey on and specifically target Hawaii's threatened and endangered species. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. The individuals and/or populations that have learned to prey on avian species will be the focus of lethal take efforts. This will occur primarily on public land, but may occur on private land with landowner approval. Barn owls and cattle*

*egrets that are on private property and not foraging on native birds will not be the focus of lethal take efforts.*

## **FWS SHOULD CONSIDER ITS OBLIGATIONS UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT**

### **I. FWS Should Prepare in Environmental Impact Statement.**

Comment: The fundamental purpose of NEPA is to improve the decision making of federal agencies by requiring an analysis of the environmental impacts of a proposed action and an exploration of alternatives to that action that would reduce or eliminate such impacts. 42 U.S.C. § 4332. The primary vehicle of this analysis is an Environmental Impact Statement (“EIS”). *Id.*

NEPA requires an acting agency to prepare a detailed EIS for federal actions that significantly affect the quality of the human environment, including “(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, [and] (iii) alternatives to the proposed action.” 42 U.S.C. § 4332(2)(C).

The EIS is the cornerstone of NEPA. An EIS is required for all “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). The Council on Environmental Quality (“CEQ”) defines “major federal action” to include “actions with effects that may be major and which are potentially subject to Federal control.” 40 C.F.R. § 1508.18 (emphasis added). The requirement to prepare an EIS is broad and intended to compel agencies to take seriously the potential environmental consequences of a proposed action. Whether an agency action is “significant” enough to require preparation of an EIS requires “considerations of both context and intensity.” 40 C.F.R. § 1508.27. The context of the action includes factors such as “society as a whole (human, national), the affected region, the affected interests, and the locality.” 40 C.F.R. § 1508.27(a). Intensity “refers to the severity of the impact” and requires several factors to be considered, including “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial”; [t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks”; [w]hether the action is related to other actions with individually insignificant but cumulative significant impacts.” 40 C.F.R. § 1508.27(b).

The context and intensity of the proposed action in this case indicate that it is significant enough to require an EIS. First of all, the effects on the quality of the human environment are likely to be highly controversial as many value the bird and are opposed to the widespread killing and eradication effort proposed in this order. Additionally, the birds [sic] diet consists of rodents, insects, and invasive frogs. Thus, killing the birds could cause the rodent population to multiply and adversely impact endemic bird populations, native plants, farm crops, and human health. For example, “there has been intense interest in determining the value of cattle egret as biological controllers of agricultural pests.” See Draft Environmental Assessment, Implementation of a Control Order for Cattle Egrets and Barn Owls in Hawaii (April 2013) (hereinafter Draft EA),

*Response: The Service recognizes that the barn owl and cattle egret have value to many people. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. As explained in the EA, populations of other invasive species such as rats, mice and coqui in Hawaii have spread independently of, and in spite of, the presence of barn owls or cattle egrets. Conversely, threatened and endangered seabird and waterbird populations are being adversely impacted by barn owls and cattle egrets. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. Native birds, especially juvenile waterbirds and nesting seabirds are less mobile and easier to catch than rodents. Cattle egrets and barn owls that have learned to prey on avian species will continue to do so.*

Comment: Second, the effects of the Proposed Order are highly uncertain and involve unknown risks. For some examples, one could look at the Draft EA that acknowledges, “impacts of alien birds are not well understood” (at 27); “direct impacts of predation by cattle egrets on waterbirds at Loko Waka have not been measured” (at 5); “little data [sic] is available” for the suggestion that cattle egrets may be impacting native invertebrate populations and may be competing with native waterbirds for these important food resources” (at 6); cattle egrets “role in transmission of foreign parasites or diseases is largely speculative” (at 7); “impacts of barn owls on forest birds in the Hawaiian Islands have not been well studied” (at 28); “there is little data available on other natural means of population regulation, and population size appears to be primarily subject to habitat and food availability” (at 8); and the relative

impacts of agricultural practice, deforestation, or other human-induced stresses on the Hawaiian hoary bate [sic] “are not known” (at 28).

*Response: As presented in the EA, credible, trained, educated scientific professionals have documented repeated occurrences of predation and response, including through remains, owl pellets, personal observations and photographs obtained with remote cameras. Predation has been documented since the 1970's on all the main Hawaiian Islands as well as on islands in the Northwestern Hawaiian Islands chain. In addition to expert and agency information, we did use available peer-reviewed literature, as noted in the Literature Cited section of the final EA. Regulations, such as control orders, are reevaluated as relevant research and information becomes available. In the event that new information becomes available, we will take that into consideration when we review this control order in the future.*

*In all scientific work there is some chance that an unknown variable has been introduced. In the interest of being fully transparent in our work, we acknowledge that chance by not using absolute terminology in our writing. We recognize that communicating that uncertainty can be unsettling, but it is consistent with the scientific approach.*

Comment: Furthermore, the Draft EA states that removing the cattle egrets and barn owl may not be possible because of associated disturbance to native species, but does not discuss the impact on native species of the proposed egg oiling, egg and nest destruction, firearms, trapping, and CO<sub>2</sub> asphyxiation. Such uncertainty calls for preparation of an EIS, not an EA.

*Response: The potential effects of the control order were analyzed in two ESA Section 7 Consultations; one within the Service and one with the National Marine Fisheries Service. The conclusion of these Section 7 consultations was that this regulation is not likely to adversely affect any endangered or threatened species. There are best management practices that participating agencies will be required to follow in implementing the control order, to minimize effects to ESA-listed species, and the benefits of controlling these two invasive predators will far outweigh any detrimental effects of implementing the action.*

Comment: Lastly, the impact of the proposed action would be severe when considered individually and cumulatively. Cumulative impacts, as defined by CEQ (40 CFR 1508.7), are impacts to the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal)

or person undertakes such other actions. Cumulative impacts may result from individually minor, but collectively significant, actions taking place over time. Cumulative impacts in this case would include the impact of egg oiling, egg and nest destruction, firearms, trapping and CO<sub>2</sub> asphyxiation on the target birds as well as other birds. It would consider the total amount of birds that would be killed throughout all the areas covered in the order. The Order and Draft EA not only fail to consider these impacts, they do not even disclose the estimate of birds to be killed.

The controversial nature, the unknown risks, and the cumulative impacts indicate that the Proposed Order would be a major federal action. Thus, FWS should prepare an EIS to inform decision-makers and the public of all the reasonable alternatives and impacts associated with the Proposed Order.

*Response: Department of Interior regulations state “The purpose of an environmental assessment is to allow the Responsible Official to determine whether to prepare an environmental impact statement or a finding of no significant impact (43 CFR 46.300). We stated in a finding of no significant impact (FONSI) that “implementation of [this regulatory change] does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). We stand by this conclusion. This action will have no significant environmental effects other than the desired effect of reduced populations of the two invasive species and reduced predation on threatened and endangered species. An Environmental Impact Statement for this action is not warranted.*

Comment: An EIS, or in the alternative, an environmental assessment (“EA”) should provide a full and fair discussion of the issues and inform decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. See 40 C.F.R. § 1502.1. The accompanying Draft EA only contains two alternatives, depredation permits and the broad depredation order.

FoA asks FWS to consider a full range of alternatives to the Proposed Order including non-lethal alternatives, adjusting human behaviors that may impact species of concern or exacerbate problems associated with invasive species, and encouraging the rehabilitation of native species without harming other species.



*Response: Lethal take is initiated after non-lethal control alone has been shown to be ineffective or unfeasible. Non-lethal attempts to control cattle egrets and barn owls include habitat alterations, changes in management practices, and hazing by humans and/or noise-making devices. Habitat alteration at nest or roost sites typically targets removal of roost or nest trees. This may be done on wildlife management areas, as it is consistent with habitat management for wetland birds and seabirds. However, not all nest and roost sites are located on public land and removing the appropriate structure(s) is often not possible. Furthermore, this technique does not resolve the depredation problem because cattle egrets and barn owls forage not only near nest or roost locations, but also frequently travel considerable distances to forage.*

*Management practices have been altered to the extent possible as another non-lethal approach. Wildlife managers have observed that cattle egrets are attracted to vegetation disturbance, such as that made by tractors and other heavy equipment. Cattle egrets follow the equipment and prey opportunistically upon waterbird chicks and other prey exposed or disturbed in the area where people are working. In response, managers have attempted to alter their management strategies by avoiding the use of heavy equipment during periods when chicks are most vulnerable. However, in Hawaii some species nest throughout the year, and chicks may be present throughout the year. This frequently makes changing management strategies inconsistent with habitat management goals. Further, once cattle egrets have learned that prey is available in an area, they return to forage even when the heavy equipment is no longer present. Active non-lethal techniques, such as hazing using noise making devices, can be an effective method in some circumstances. However, they are non-specific and disturb all wildlife, not just cattle egrets and barn owls. On wildlife management areas and other public lands, hazing disturbs the threatened and endangered species and other protected wildlife intended to be protected by dissuading cattle egrets and barn owls.*

*Trap and relocation of cattle egrets and/or barn owls was considered. These species cannot be relocated within the Hawaiian archipelago, as they are known to travel between islands and are likely to return, perpetuating the currently described conflict with threatened and endangered species. The Service made direct contact with the continental United States and provinces in Canada where populations of barn owls are locally endangered. As of publication of the final rule, no other locations or agencies have agreed to accept relocated birds. Additionally, the cost of trapping and relocating the barn owls and cattle egrets could substantially reduce other needed efforts to protect threatened and endangered species in Hawaii.*

*Sterilization was also proposed as an alternative to lethal take. However, sterilizing cattle egrets and barn owls does not stop them, in the short term, from eating native wildlife. Further, the large costs for implementing birth control for these species, particularly on outlying islands in Hawaii, would reduce the funding available for more vital threatened and endangered species protection and restoration efforts.*

*Lethal take of problem individuals is a recognized, effective, and sometimes necessary tool in wildlife management. The use of lethal take does not reflect any individual preference for certain species. The Service works toward conservation of all species protected by the MBTA and the ESA, and only employs lethal take as a management strategy when it can be accomplished without causing detrimental population-level effects to any protected species. All individuals and agencies participating in lethal take activities will be required to use humane methods of capture and euthanasia, and to adhere to the American Veterinary Medical Association Guidelines on euthanasia.*

**Comment: 1. FWS Should Consider the Ethical Impacts of its Actions**

It is time for FWS to recognize that individual birds that may be subject to its actions have intrinsic value and this in turn demands that FWS incorporate ethics into its consideration of wildlife management activities. There is a growing recognition among conservationists and biologists that ethics must play a greater role in wildlife policy. See, e.g., Fox & Bekoff, *Integrating Values and Ethics into Wildlife Policy and Management – Lessons from North America*, Animals 2011, 1, 126-143. But as Fox and Bekoff point out: “[w]hile many agree that ethics must play a central role in any project involving [animals], it is often interesting to note that in many books on human-animal interactions ... there is often no mention of ethics. This needs to change.” *Id.* at 129. The same must be said for the regulation of animals.

Undoubtedly, discussion in the context of policy development about ethics and animals can make some people uncomfortable. But, of course, just a generation ago it was also unheard of for an agency like FWS to incorporate the humane treatment of animals into its decision-making process. This has changed dramatically. Inclusion of ethical impacts and considerations allows federal, state, and local decision-makers, as well as the public, to better understand the impact of human actions on animal welfare, and allows for better decisions to be made.

Our generation needs to adopt the same approach to educating the decision-makers and the public as to the role of ethics in making decisions to “manage” animals. Indeed, it is our jobs as conservationists, animal advocates and scientists “to work toward public education and information dissemination to address real and perceived fears held” by others. *Id.* at 128. What is missing in FWS’s Proposed Order and Draft EA, is the viewpoint of the animals. Again, from Fox and Bekoff:

The growing body of literature on animal cognition and emotions demonstrates undeniably that animals have interests and points of view. Like us, they avoid pain and suffering and seek pleasure. They form close social relationships, cooperate with other individuals, and likely miss their friends when they are apart. Emotions have evolved, serving as “social glue,” and playing major roles in the formation and maintenance of social relationships among individuals. Emotions also serve as “social catalysts,” regulating behaviors that guide the course of social encounters when individuals follow different courses of action, depending on their situations. If we carefully study animal behavior, we can better understand what animals are experiencing and feeling and how this factors into how we treat them.

*Id.* at 131.

The EA or EIS fails to include a serious discussion of the ethical implications of the proposed action, egg oiling, egg and nest destruction, firearms, trapping, cervical dislocation, and CO<sub>2</sub> asphyxiation. The Draft EA concludes that any action that would reduce predation on native Hawaiian species would be expected to have a positive impact, but includes no discussion on the impact of killing other birds.

*Response: Lethal take is initiated after non-lethal control alone has been shown to be ineffective or unfeasible. Non-lethal attempts to control cattle egrets and barn owls include habitat alterations, changes in management practices, and hazing by humans and/or noise-making devices. Habitat alteration at nest or roost sites typically targets removal of roost or nest trees. This may be done on wildlife management areas, as it is consistent with habitat management for wetland birds and seabirds. However, not all nest and roost sites are located on public land and removing the appropriate structure(s) is often not possible. Furthermore, this technique does not resolve the depredation problem*

*because cattle egrets and barn owls forage not only near nest or roost locations, but also frequently travel considerable distances to forage.*

*Lethal take of problem individuals is a recognized, effective, and sometimes necessary tool in wildlife management. The use of lethal take does not reflect any individual preference for certain species. The Service works toward conservation of all species protected by the MBTA and the ESA, and only employs lethal take as a management strategy when it can be accomplished without causing detrimental population-level effects to any protected species. All individuals and agencies participating in lethal take activities will be required to use humane methods of capture and euthanasia, and to adhere to the American Veterinary Medical Association Guidelines on euthanasia.*

Comment: Humans intentionally introduced the cattle egret and barn owl to Hawai'i in the late 1950's, and they have become part of the culture and ecosystem. People have come to enjoy viewing the owls, and depend on the owls for the role they have adapted in the ecosystem. FWS should not take action to kill these birds before considering all the impact on humans and the environment.

*Response: The terms used in this rule and the EA were selected to be consistent with Migratory Bird Treaty Act, Executive Order 13112, and Service regulations and policy. The following terms are defined in Executive Order 13112:*

- "Introduction" means the intentional or unintentional escape, release, dissemination, or placement of a species into an ecosystem as a result of human activity.*
- "Native species" means, with respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.*
- "Alien species" means, with respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.*
- "Invasive species" means an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.*

*Cattle egrets and barn owls are alien species because they were introduced to Hawai'i in the late 1950's as attempts to control rodents in sugar cane and horn flies on cattle. Barn owls and cattle egrets meet the criteria of invasive, as they cause environmental harm. This is described in the environmental*

*assessment (EA), "Predation by cattle egrets and barn owls is currently having a direct, detrimental impact on numerous threatened or endangered species in the Hawaiian Islands."*

*The introduction of invasive species can have a dramatic effect on our natural resources, human health, and economy. The reason for this is that in a natural or native community, species evolve together into an ecosystem with many checks and balances that limit the population growth of any one species. Controlling influences include predators, herbivores, diseases, parasites, and other organisms competing for the same limited resources. These checks and balances form the complex web of life that makes up an ecosystem and in which a native species competes for survival. However, when an organism is introduced into an ecosystem in which it did not evolve naturally, it no longer has some or all of those limits and its numbers can dramatically increase. Unnaturally large population numbers can then have severe effects as they prey upon, compete with and displace native species.*

*The purpose of the Endangered Species Act is to protect and recover imperiled species and the ecosystems upon which they depend. Imperiled Hawaiian species are directly preyed upon by invasive species and also depend on an ecosystem of native flora and fauna that is disrupted and displaced by invasive species. The changes to the native ecosystem that occur as a result of invasive species introductions hinder or prevent the protection and recovery of threatened and endangered species. Removal of cattle egrets and barn owls is one step in restoring native Hawaiian ecosystems.*

**Comment: 2. FWS Should Consider Potential Negative Impacts of Killing the Cattle Egret and Barn Owl**

Cattle egrets and barn owls were introduced in an attempt to control sugar cane and horn flies on cattle. Before taking action in an attempt to eradicate the cattle egret and barn owl, the FWS should consider the beneficial impacts that these species have, and what could happen if they are removed. The Draft EA acknowledged that there "there is general agreement that Orthopetra (grasshopper, crickets, locusts) make up the most important insect order in the dietary spectrum of the cattle egrets." Draft EA at 29. Additionally, the "stomach contents of 70 barn owls shot at Lihue Airport, Kauai, indicated a large number of crickets and grasshoppers in the diet." *Id.* at 11. However, the Draft EA concludes that the control order is not expected to have any significant impacts to agriculture or the economic environment. The only support for this conclusion in the Draft EA is a Conclusory statements that agriculture pests continue to occur, and no demonstrable

decline in rodents and insects can be attributable to the cattle egret or barn owl. However, there is no indication of how much these birds eat, how many birds will be removed, or how this could impact other species. Nor is there any indication of how FWS arrived at its conclusions. While these birds were introduced without full consideration of the impacts. FWS should not also attempt to eradicate them without full consideration of the impacts.

*Response: The Service recognizes that the barn owl and cattle egret have value to many people. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. As explained in the EA, populations of other invasive species such as rats, mice and coqui in Hawaii have spread independently of, and in spite of, the presence of barn owls or cattle egrets. Conversely, threatened and endangered seabird and waterbird populations are being adversely impacted by barn owls and cattle egrets. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. Native birds, especially juvenile waterbirds and nesting seabirds are less mobile and easier to catch than rodents. Cattle egrets and barn owls that have learned to prey on avian species will continue to do so.*

**Comment: 3. FWS Should Consider the Potential Negative Impact of Proposed Order on Other Species**

The “need” for the Proposed Order is to protect native species. However, the order and Draft EA only contain vague assertions that these cattle egret and barn owl have a negative effect on native species. There is no detailed information or numbers regarding the actual impact of the cattle egret and barn owl on native species. Nor is there any discussion of the scientific method that was employed, if any, to determine that the birds have a significant negative impact on native species.

Furthermore, the Proposed Order could negatively impact native species. FWS states that the harassment of birds is “not always feasible because of the associated disturbance that is caused to listed species. Specific depredation permits are often ineffective in preventing predation because of logistical difficulties inherent in foraging and roosting nature of cattle egrets and barn owls and because staff and resource limitation to carry out the activates authorized.” Draft EA at 34. It is possible that the Proposed Order could also disturb listed species. There is no discussion in the Proposed Order or the Draft EA about the logistics and staff resources to carry out the plan to kill these birds. Nor is there any

indication that FWS conducted a consultation, as required by the ESA, regarding the impact of the Proposed Order on endangered species.

*Response: The potential effects of the control order were analyzed in two ESA Section 7 Consultations; one within the Service and one with the National Marine Fisheries Service. The conclusion of these Section 7 consultations was that this regulation is not likely to adversely affect any endangered or threatened species. There are best management practices that participating agencies will be required to follow in implementing the control order, to minimize impacts to ESA-listed species, and the benefits of controlling these two invasive predators will far outweigh any detrimental effects of implementing the action.*

Before the FWS approves the Proposed Order it must reconsider the legal and ethical impacts of the proposed actions. FoA strongly opposes the Proposed Order to allow agencies to kill the cattle egret and barn owl.

Sincerely,

Jenni Barnes Associate Attorney

Wildlife Law Program

Friends of Animals

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**5. NGO\_5 Submitter Name:** Good Shepherd Foundation, Soma Grismaijer

**Docket No:** FWS-HQ-MB-2013-0070-0010

**Date Received:** 12/11/2013

Comment: I am an environmental planner, anthropologist, author, and co-director of the Good Shepherd Foundation. I also live in a rain forest preserve that is currently home to barn owls, which I enjoy hearing every night. I also enjoy occasionally seeing cattle egrets nearby.

I have spoken with friends and neighbors about the proposed rule change to lift permitting requirements and encourage statewide killing of these birds. I would like to share with you my impressions and suggestions. For many people in Hawaii today, these animals are a large part of our wildlife. While we would like to also see more native and endangered birds, the fact is that introduced species now largely define the wildlife experience in modern Hawaii. It is the wildlife we love. Efforts to kill cattle egrets and barn owls are perceived by many residents as a direct threat to our wildlife! While it is the government's intention to preserve "native" wildlife, doing so at the expense of "introduced" wildlife is to attack the animals which give many people, myself included, a warm connection to nature and the wild. The average person doesn't usually see endangered species in her daily life and interactions with wildlife. We mostly see introduced wildlife. And many people have compassion for ALL birds and wildlife, regardless of whether it was introduced or considered "native". This proposed rule change threatens the wildlife people know and love. You want to shoot our owls and egrets! Regardless of their geopolitical heritage, they are beautiful and awesome animals in many peoples' hearts. Killing them in any context feels like a crime. This killing goes against part of the mission of the USFWS, which is to encourage positive interactions of people with the wild. It also sets a violent example to the public of how to interact with wildlife.

*Response: The Service recognizes that the barn owl and cattle egret have value to many people. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. Regulation and management of barn owls and cattle egrets in the United States is the responsibility of the U.S. Fish and Wildlife Service. The Service operates under many directives. Many are from Congress, such as the National Environmental Policy Act, Migratory Bird Treaty Act, the Endangered Species Act, and the Wild Bird Conservation Act. Others are from the Executive Branch of the U.S. Government, such as Executive Orders or Secretarial Orders. In this case, cattle egrets and barn owls are protected under the Migratory Bird Treaty Act, but the Act also allows for take of protected species when responsible management dictates it is necessary. Killing birds protected under the Migratory Bird Treaty Act is illegal "Unless and except as permitted by regulations made as hereinafter provided in this subchapter" (16 U.S.C. 703(a)). Executive Order 13112 directs federal agencies to control populations of invasive species in a cost-effective and environmentally sound manner in order to minimize the effects of invasive species, including ecological effects. We agree with your desire to see more native bird species. Controlling invasive predators is one tool in a suite of methods that can be used to benefit all native species and native ecosystems.*



Comment: I understand that you may use the ESA to rationalize and justify the slaughter of these beautiful creatures. But it is still slaughter of the innocent, a destruction of wildlife, and it feels very offensive to those who love nature and animals.

*Response: Lethal take is initiated after non-lethal control alone has been shown to be ineffective or unfeasible. Non-lethal attempts to control cattle egrets and barn owls include habitat alterations, changes in management practices, and hazing by humans and/or noise-making devices. Habitat alteration at nest or roost sites typically targets removal of roost or nest trees. This may be done on wildlife management areas, as it is consistent with habitat management for wetland birds and seabirds. However, not all nest and roost sites are located on public land and removing the appropriate structure(s) is often not possible. Furthermore, this technique does not resolve the depredation problem because cattle egrets and barn owls forage not only near nest or roost locations, but also frequently travel considerable distances to forage.*

*Management practices have been altered to the extent possible as another non-lethal approach. Wildlife managers have observed that cattle egrets are attracted to vegetation disturbance, such as that made by tractors and other heavy equipment. Cattle egrets follow the equipment and prey opportunistically upon waterbird chicks and other prey exposed or disturbed in the area where people are working. In response, managers have attempted to alter their management strategies by avoiding the use of heavy equipment during periods when chicks are most vulnerable. However, in Hawaii some species nest throughout the year, and chicks may be present throughout the year. This frequently makes changing management strategies inconsistent with habitat management goals. Further, once cattle egrets have learned that prey is available in an area, they return to forage even when the heavy equipment is no longer present. Active non-lethal techniques, such as hazing using noise making devices, can be an effective method in some circumstances. However, they are non-specific and disturb all wildlife, not just cattle egrets and barn owls. On wildlife management areas and other public lands, hazing disturbs the threatened and endangered species and other protected wildlife intended to be protected by dissuading cattle egrets and barn owls.*

*Trap and relocation of cattle egrets and/or barn owls was considered. These species cannot be relocated within the Hawaiian archipelago, as they are known to travel between islands and are likely to return, perpetuating the currently described conflict with threatened and endangered species. The*

*Service made direct contact with the continental United States and provinces in Canada where populations of barn owls are locally endangered. As of publication of the final rule, no other locations or agencies have agreed to accept relocated birds. Additionally, the cost of trapping and relocating the barn owls and cattle egrets could substantially reduce other needed efforts to protect threatened and endangered species in Hawaii.*

*Sterilization was also proposed as an alternative to lethal take. However, sterilizing cattle egrets and barn owls does not stop them, in the short term, from eating native wildlife. Further, the large costs for implementing birth control for these species, particularly on outlying islands in Hawaii, would reduce the funding available for more vital threatened and endangered species protection and restoration efforts.*

*Lethal take of problem individuals is a recognized, effective, and sometimes necessary tool in wildlife management. The use of lethal take does not reflect any individual preference for certain species. The Service works toward conservation of all species protected by the MBTA and the ESA, and only employs lethal take as a management strategy when it can be accomplished without causing detrimental population-level effects to any protected species. All individuals and agencies participating in lethal take activities will be required to use humane methods of capture and euthanasia, and to adhere to the American Veterinary Medical Association Guidelines on euthanasia.*

Comment: In addition, the killing of birds not directly affecting endangered species feels like a type of genocide. The proposed rule change would make it permanent open season on these birds, everywhere in the islands. A species cleansing, if you will. Even the birds we live with, hear at night, and admire for their natural beauty and awesome presence. All are potential targets. I realize that there were no direct calls for complete eradication. However, the EA implies such by admitting that local regulation does not work because of recruitment of birds from other islands. Clearly, then, a statewide killing is being implied if not directly stated.

*Response: Enactment of this control order will not result in “open season” or “species cleansing”. Enacting this control order will not eradicate any life form, as control will only be authorized in Hawaii where both species are considered invasive. Cattle egrets and barn owls have substantial populations where they naturally exist, and this rule will not authorize control in those areas.*

*Authorization to control cattle egrets and barn owls will be restricted to agencies with authority and responsibility for managing wildlife and invasive species. Those authorized agencies are identified in the control order. Control of cattle egrets and barn owls will not be allowed by private citizens or by any group not specifically identified in the control order. Any individual not designated to act on behalf of one of the agencies specifically identified in the control order will not be allowed to take or possess cattle egrets or barn owls, their parts, nests or eggs without applying for a federal permit.*

*The intent of this Order is to provide a tool to allow removal of individuals and populations which have learned to prey on and specifically target Hawaii's threatened and endangered species. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. The individuals and/or populations that have learned to prey on avian species will be the focus of control efforts. This will occur primarily on public land, but may occur on private land with landowner approval. Barn owls and cattle egrets that are on private property and not foraging on native birds will not be the focus of control efforts.*

Comment: Changing the rules to allow the unregulated killing of these beautiful and respected birds shows a deep lack of respect for these creatures, and for the people who love them. For example, one method mentioned in the EA for owl control would involve attracting the owls by loudly playing recordings of its call, and then firing on the assembled birds. Realize this slaughter is of a beautiful owl deliberately introduced for its qualities. Owls are also respected in folklore. Does the federal government want a policy where these animals can be slaughtered without any oversight or concern or demonstrated need? People inherently love and want to protect owls and egrets. Their slaughter would be perceived as barbaric, cruel, and horrific.

*Response: Enactment of this control order will not result in unregulated killing, since it does not remove the cattle egret or the barn owl from the list of species protected by the Migratory Bird Treaty Act. Neither does this ruling allow private citizens to capture, kill or harm cattle egrets or barn owls, or their parts, nests or eggs. Killing birds protected under the Migratory Bird Treaty Act is illegal "Unless and except as permitted by regulations made as hereinafter provided in this subchapter" (16 U.S.C. 703(a)). The provisions of the MBTA allow the federal government to issue permits or control orders in specific circumstances. This control order is a regulation consistent with the USFWS permit system. Authorization to lethally take cattle egrets and barn owls without a permit will be restricted to agencies*

*with authority and responsibility for managing wildlife and invasive species. Those authorized agencies are identified in the control order. The control order will not authorize lethal take of cattle egrets and barn owls by private citizens or by any group not specifically identified in the control order. Any individual not designated to act on behalf of one of the agencies specifically identified in the control order will not be allowed to take or possess cattle egrets or barn owls, their parts, nests or eggs without a federal permit. Doing so without the necessary authorization is a violation of the MBTA.*

Comment: The solution? After all, we do need to protect endangered species. I suggest that any control efforts to manage cattle egrets and barn owls continue to be supported on a local, as needed basis, with permits continuing to be required. This may take extra time and effort, but it assures that the killing is needed. It also demonstrates that the government prefers nonlethal alternatives to wildlife conflict management, while exercising oversight, caution and restraint when lethal means are required.

*Response: Lethal take is initiated after non-lethal control alone has been shown to be ineffective or unfeasible. Non-lethal attempts to control cattle egrets and barn owls include habitat alterations, changes in management practices, and hazing by humans and/or noise-making devices. Habitat alteration at nest or roost sites typically targets removal of roost or nest trees. This may be done on wildlife management areas, as it is consistent with habitat management for wetland birds and seabirds. However, not all nest and roost sites are located on public land and removing the appropriate structure(s) is often not possible. Furthermore, this technique does not resolve the depredation problem because cattle egrets and barn owls forage not only near nest or roost locations, but also frequently travel considerable distances to forage.*

*Management practices have been altered to the extent possible as another non-lethal approach. Wildlife managers have observed that cattle egrets are attracted to vegetation disturbance, such as that made by tractors and other heavy equipment. Cattle egrets follow the equipment and prey opportunistically upon waterbird chicks and other prey exposed or disturbed in the area where people are working. In response, managers have attempted to alter their management strategies by avoiding the use of heavy equipment during periods when chicks are most vulnerable. However, in Hawaii some species nest throughout the year, and chicks may be present throughout the year. This frequently makes changing management strategies inconsistent with habitat management goals. Further, once cattle egrets have learned that prey is available in an area, they return to forage even when the heavy equipment is no longer present. Active non-lethal techniques, such as hazing using noise making devices,*

*can be an effective method in some circumstances. However, they are non-specific and disturb all wildlife, not just cattle egrets and barn owls. On wildlife management areas and other public lands, hazing disturbs the threatened and endangered species and other protected wildlife intended to be protected by dissuading cattle egrets and barn owls.*

*Trap and relocation of cattle egrets and/or barn owls was considered. These species cannot be relocated within the Hawaiian archipelago, as they are known to travel between islands and are likely to return, perpetuating the currently described conflict with threatened and endangered species. The Service made direct contact with the continental United States and provinces in Canada where populations of barn owls are locally endangered. As of publication of the final rule, no other locations or agencies have agreed to accept relocated birds. Additionally, the cost of trapping and relocating the barn owls and cattle egrets could substantially reduce other needed efforts to protect threatened and endangered species in Hawaii.*

*Sterilization was also proposed as an alternative to lethal take. However, sterilizing cattle egrets and barn owls does not stop them, in the short term, from, eating native wildlife. Further, the large costs for implementing birth control for these species, particularly on outlying islands in Hawaii, would reduce the funding available for more vital threatened and endangered species protection and restoration efforts.*

*We agree that there is a need to protect threatened and endangered species. Controlling invasive predators is one tool in a suite of methods that can be used to benefit all native species and native ecosystems. Lethal take of problem individuals is a recognized, effective, and sometimes necessary tool in wildlife management. The use of lethal take does not reflect any individual preference for certain species. The Service works toward conservation of all species protected by the MBTA and the ESA, and only employs lethal take as a management strategy when it can be accomplished without causing detrimental population-level effects to any protected species. All individuals and agencies participating in lethal take activities will be required to use humane methods of capture and euthanasia, and to adhere to the American Veterinary Medical Association Guidelines on euthanasia.*

**6. NGO\_6 Submitter Name: Sydney Singer, Good Shepherd Foundation\_1**

**Docket No: FWS-HQ-MB-2013-0070-0006**

**Date Received: 11/21/2013**

Comment: THE SOCIAL IMPACTS OF KILLING HAWAII'S CATTLE EGRETS AND BARN OWLS I am a medical anthropologist, author, and director of the Institute for the Study of Culturogenic Disease, located in Pahoa, Hawaii. We study how certain cultural attitudes and behaviors can lead to sickness. We believe the proposed rule change, which essentially encourages the eradication of introduced cattle egrets and barn owls in Hawaii, will exacerbate racial tensions existent in current Hawaiian society. While Hawaii is portrayed as a melting pot to the world, the reality is that there is deep rooted racial and cultural antagonism from local and native groups against immigrant groups, the latter pejoratively referred to as "haole". Bullying in schools and at the workplace by "locals" against immigrants, usually Caucasian, is a big problem in Hawaii. One of our areas of concern has been the impact of invasive species control on these human interactions. Fundamentally, the invasive species issue is an anti-immigration policy, supported by a sentiment that certain immigrant species "don't belong in Hawaii", and are competing with local species for resources and space. Of course, this same sentiment is expressed about human immigrants. The fact is, environmental policy mirrors political policy. Xenophobia in the political world, with our current immigration crisis, is mirrored by bio-xenophobia, a fear of immigrant species. Killing immigrants to return a culture to pre-contact conditions is called genocide and ethnic cleansing.

*Response: Comment noted.*

Comment: Killing cattle egrets and barn owls to return the environment to pre-contact conditions is species cleansing, and a genocide against these wonderful creatures.

*Response: Lethal control of problem individuals is a recognized, effective, and sometimes necessary tool in wildlife management. The use of lethal control does not reflect any individual preference for certain species.*

Comment: We must find nonlethal solutions to the impacts of human and nonhuman immigration. Militant solutions that result in the killing of innocent beings, regardless of their species, is morally reprehensible and will lead to more violence. As a nation that has been at war now for over a decade, we have become accustomed to killing and violence. Our streets are threatened by mobs with violent intent, punching out victims for pleasure. The victims, of course, are usually another race. Racist hatred runs deep in our culture, and the invasion biology agenda of cleansing ecosystems of immigrant species feeds this hatred.

*Response: Comment noted.*

Comment: I truly feel sorrow for the native and endangered species that cannot compete with these immigrant species for survival. We should be encouraging the rehabilitation of these species without having to harm other species whose sole fault is their success at surviving. As climate change redefines environmental conditions, these hardy immigrant species may be better suited for survival in the changing world than the native species that are adapted to the conditions of the past. We may lose our endangered and native species in addition to the species eradicated because they are nonnative. The challenges to our endangered Hawaiian birds goes far beyond the impacts of cattle egrets and barn owls. The greater threats are development of wetlands and other wild spaces, pollution of the air and water and ground, climate change, and disease. Other predators include cats, rats, mongooses, dogs, and humans. Killing tens of thousands of cattle egrets and barn owls can increase local populations of other predators of these endangered birds, especially egg-eating rats. Essentially, this is an experiment to see if killing massive numbers of cattle egrets and barn owls will help save endangered species.

*Response: We agree that there is a need to protect and restore threatened and endangered species. We also agree that other introduced species and environmental factors threaten native species in Hawaii. Multiple factors must be incorporated into an effective conservation strategy. Where it has the authority to do so, the Service seeks to implement actions to assist in the recovery of threatened or endangered species and the conservation of other protected wildlife. The Service works cooperatively with multiple entities on actions such as constructing predator-proof fencing, protecting and restoring wildlife habitat, researching disease, and engaging in predator control whenever possible. The Service can lethally take other predators, such as mongooses and cats, on Service lands and is supportive of predator management as allowed elsewhere in Hawaii. We agree that predator control without adequate habitat protection measures will not be effective in conserving and restoring threatened and endangered species. Likewise, habitat conservation alone without adequate predator control will not be effective in conserving and restoring populations of threatened and endangered species. Lethal take of cattle egrets and barn owls in Hawaii is just one part of the Service's efforts to meet its various obligations – including protection and restoration of threatened and endangered species populations and habitat, protection of native migratory bird species, and management of National Wildlife Refuges.*

Comment: It is easy for a militant culture to use militant options when feeling frustrated with nonlethal methods. However, just as we insist on civility, compassion, and empathy when dealing with human immigrant issues and abhor violent measures, we must do the same with nonhuman immigrant issues. We can level the playing field, improving the competitive edge for native and endangered species, by helping the weak, rather than by weakening the strong. We can embrace and value all life, native and immigrant, and find ways for co-existence. The alternative is war and its destructive influences. For the way we treat animals will be the way we treat people.

*Response: Comment noted.*

**7. NGO\_7 Submitter Name: Sydney Singer, Good Shepherd Foundation\_2**

**Docket No: FWS-HQ-MB-2013-0070-0094**

**Date Received: 1/31/2014**

From:

Sydney Ross Singer

Medical Anthropologist, Biologist, Author

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To:

Public Comments Processing,

Attention: FWS-HQ-MB-2013-0070;

Division of Policy and Directives Management;

US Fish and Wildlife Service;

4401 North Fairfax Drive, MS 2042-PDM;

Arlington, VA 22203-1610.

Migratory Bird Management

U.S. Fish and Wildlife Service

911 Northeast 11th Avenue

Portland, OR 97232-4181



Comment on Control Order for Introduced Migratory Bird Species in Hawaii and Related DEA

ID: FWS-HQ-MB-2013-0070-0001

January 13, 2014

Aloha,

I have already commented as a medical anthropologist on this proposed rule for a control order for cattle egrets and barn owls throughout Hawaii. I would like to amend my comment to add the following, which are based on the DEA for this proposed rule and are made in the context of my training as a biologist and environmentalist.

Comment: A. Cattle Egrets

1. Lack of Scientific Evidence of a Predation Problem

The EA states, "USFWS personnel believe this type of predation is one explanation for high waterbird hatch success rates followed by low fledgling rates, but observations are difficult to collect and records do not reflect the probable magnitude of the problem. Cattle egrets take young at an early stage and no carcasses or remains are found on the wetlands because the small chicks are either eaten whole or carried to the rookery (M Silbernagle, USFWS pers. comm.). " (p.6) Note this is a personal communication, and not a published, peer reviewed study. Alternative explanations, such as feral cat predation, cannibalism, and takes by other bird species are not addressed. There is no basis given for the statement "records do not reflect the probable magnitude of the problem".

The argument could be made that common predators of egrets and native waterbirds, such as feral cats, rats, mongooses, dogs, herons, and other predators, are diverted from killing native birds by the availability of egret chicks, essentially providing an alternative food source for native species predators.

*Response: We agree that other introduced species and environmental factors threaten native species in Hawaii. Multiple factors must be incorporated into an effective conservation strategy. Where it has the authority to do so, the Service seeks to implement actions to assist in the recovery of threatened or endangered species and the conservation of other protected wildlife. The Service works cooperatively with multiple entities on actions such as constructing predator-proof fencing, protecting and restoring wildlife habitat, researching disease, and engaging in predator control whenever possible. The Service can lethally take other predators, such as mongooses and cats, on Service lands and is supportive of*

*predator management as allowed elsewhere in Hawaii. We agree that predator control without adequate habitat protection measures will not be effective in conserving and restoring threatened and endangered species. Likewise, habitat conservation alone without adequate predator control will not be effective in conserving and restoring populations of threatened and endangered species. Lethal take of cattle egrets and barn owls in Hawaii is just one part of the Service's efforts to meet its various obligations – including protection and restoration of threatened and endangered species populations and habitat, protection of native migratory bird species, and management of National Wildlife Refuges.*

Comment: In addition, the statement, "USFWS personnel believe ..." is not a scientific conclusion, and would not stand up in any court of law as fact. It is hearsay and opinion, at best, and not necessarily fact. Instead of promulgating one's "belief" system, which is subject to bias, USFWS should present scientific evidence in a peer reviewed study.

Further, the EA states, "In addition to feeding on vertebrates, cattle egrets also feed on numerous invertebrates. This suggests they may be impacting native invertebrate populations, for which little data is available, and may be competing with native waterbirds for these important food resources." (p.5) Again, without data, this is pure speculation and hearsay, and does not constitute a scientific conclusion. Alternatively, the egrets may be consuming nonnative invertebrates which are competing with native invertebrates, thereby assisting the latter's survival. The argument could be made any way one wishes without scientific evidence to back any of this up.

*Response: As presented in the EA, credible, trained, educated scientific professionals have documented repeated occurrences of predation and response, including through remains, owl pellets, personal observations and photographs obtained with remote cameras. Predation has been documented since the 1970's on all the main Hawaiian Islands as well as on islands in the Northwestern Hawaiian Islands chain. In addition to expert and agency information, we did use available peer-reviewed literature, as noted in the Literature Cited section of the final EA. Regulations, such as control orders, are reevaluated as relevant research and information becomes available. In the event that new information becomes available, we will take that into consideration when we review this control order in the future.*

*In all scientific work there is some chance that an unknown variable has been introduced. In the interest of being fully transparent in our work, we acknowledge that chance by not using absolute*

*terminology in our writing. We recognize that communicating that uncertainty can be unsettling, but it is consistent with the scientific approach.*

## 2. Exaggerated Food Consumption Claims

Comment: The EA makes exaggerated claims when it states, "As one example of potential predation impacts, using these calculations, a single cattle egret pair with a brood of three would need to take as many as 29 Hawaiian stilts per day to meet their food requirements during the chickrearing period." (p.5). However, this assumes that stilt chicks would constitute the entire diet of these egrets, which is absurd and hyperbolic.

*Response. As presented in the EA, cattle egrets and barn owls have been documented preying upon threatened and endangered waterbirds and seabirds, including Hawaiian stilt, Hawaiian coot, Hawaiian common moorhen, Hawaiian duck, Hawaiian petrel, and Newell's shearwater. Hawaiian honeycreeper bones have also been found in owl pellets. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. Native birds, especially juvenile waterbirds and nesting seabirds are less mobile and easier to catch than rodents. Cattle egrets and barn owls that have learned to prey on avian species will continue to do so. Although cattle egrets and barn owls prey primarily on rodents and insects in their natural ranges, where they have been introduced to Hawaii they have adapted to the available prey base, which includes birds. As noted in the EA, cattle egrets and barn owls have become an increasing problem in efforts to protect and restore threatened and endangered species in Hawaii.*

Comment: The following paragraph states, "Diversity of food items taken by individuals is related to localized availability of prey and foraging opportunities in any given area. In agricultural environments cattle egrets often forage in close association with livestock, preying on insects that are disturbed by grazing animals moving through vegetation." This means that a pair of egrets with a brood of three could consume a huge number of insects, equivalent, in the example above, to 29 stilts per day. THAT'S A LOT OF INSECTS, and suggests an important role for these birds in pest management near livestock.

*Response: The Service recognizes that the barn owl and cattle egret have value to many people. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. As explained in the EA, populations of other invasive species such as rats, mice and coqui in Hawaii have spread independently of, and in spite of, the presence of barn owls or cattle egrets. Conversely, threatened and endangered seabird and waterbird populations are being adversely impacted by barn owls and cattle egrets. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. Native birds, especially juvenile waterbirds and nesting seabirds are less mobile and easier to catch than rodents. Cattle egrets and barn owls that have learned to prey on avian species will continue to do so.*

Comment: The following paragraph states, "Known prey items include grasshoppers, crickets, spiders, flies, moths, cicadas, ticks, millipedes, centipedes, earthworms, rodents, frogs, fish, aquatic insects and birds (including eggs and nestlings) (Telfair 2006)." This shows that these generalists consume mostly nonnative, invasive species, and the benefit of this predation on native species, despite occasional native species depredation, is not known, but could be significant. Without scientific studies of the overall, cumulative impact of cattle egrets on native and nonnative species populations, one could only speculate. The bias of this EA is to speculate against the egrets, but an unbiased analysis calls for actual data, not empty claims or anecdotal evidence.

Again, the EA states without evidence, "Direct impacts of predation by cattle egrets on waterbirds at Loko Waka have not been measured; however, waterbird populations and recruitment at this site remain low." If this is so important, then why are there no measurements? WHERE IS THE RESEARCH!

"Cattle egrets commonly forage on offshore islets of O'ahu in the same areas as foraging migratory shorebirds and possible (sic) compete for the same invertebrate resource. 11 (p.6) Again, this is regarded as a possibility, not a fact. It has not been established that there is a shortage of invertebrates, or whether the invertebrates consumed are native or invasive and what impact this may have on native invertebrates and vertebrates.

"As a vector, cattle egrets may transmit parasites and disease organisms to livestock, domestic fowl, wild birds, and people. Thus this species' dispersal and range expansion are of medical and veterinary interest, although its role in transmission of foreign parasites or diseases is largely speculative." (p. 7) (Emphasis added.) If this is an important issue, then why is there no research to support this speculation? A kill order is not justified on speculation and belief.

"In other words, should WNV arrive in Hawai'i, cattle egrets could vector the disease from and between lowland wetland sites and upper elevations of the islands, increasing the possibility of WNV transmission to both native forest birds and human populations." (p. 7) Again, this is pure speculation, and the argument could be made that any migratory bird that is exposed to mosquitoes, including native species, could cause this problem.

*Response: As presented in the EA, credible, trained, educated scientific professionals have documented repeated occurrences of predation and response, including through remains, owl pellets, personal observations and photographs obtained with remote cameras. Predation has been documented since the 1970's on all the main Hawaiian Islands as well as on islands in the Northwestern Hawaiian Islands chain. In addition to expert and agency information, we did use available peer-reviewed literature, as noted in the Literature Cited section of the final EA. Regulations, such as control orders, are reevaluated as relevant research and information becomes available. In the event that new information becomes available, we will take that into consideration when we review this control order in the future.*

*In all scientific work there is some chance that an unknown variable has been introduced. In the interest of being fully transparent in our work, we acknowledge that chance by not using absolute terminology in our writing. We recognize that communicating that uncertainty can be unsettling, but it is consistent with the scientific approach.*

*Lethal take of problem individuals is a recognized, effective, and sometimes necessary tool in wildlife management. The use of lethal take does not reflect any individual preference for certain species. The Service works toward conservation of all species protected by the MBTA and the ESA, and only employs lethal take as a management strategy when it can be accomplished without causing detrimental population-level effects to any protected species.*

### 3. Management

Comment: "In the Hawaiian Islands it is possible that chicks or adult birds could be taken by barn owls (*Tyto alba*), Hawaiian short-eared owls, Hawaiian hawk or 'lo (*Buteo solitarius*), black-crowned night herons, or 'auku'u (*Nycticorax nycticorax*), mongoose (*Herpestes javanicus*), or domestic dogs (*Canis familiaris*) or cats (*Felis catus*). Nests are vulnerable to adverse weather such as high winds (nest sites in trees), flooding (nest sites in low shrubs in swamps), and hail, as well as predation. There is little data available on other natural means of population regulation ... " (p. 8) (Emphasis added.) This means that eradication of the barn owls may impair cattle egret control. It also means that the ALTERNATIVE ACTION OF DEVELOPING OTHER NATURAL MEANS OF POPULATION CONTROL HAS NOT BEEN EVALUATED IN THIS EA AS A POSSIBLE COURSE OF ACTION.

"A coordinated, statewide control program which includes lethal control along with long-term measures to prevent recruitment among survivors and techniques to remove roosts and rookeries is considered the only effective way to control cattle egret populations in Hawai'i". (p.9) The term "is considered" is offered with no scientific basis. Given that natural means of population regulation may be possible but have not been studied, this statement is unsupported by any hard facts. Since those involved in this eradication have a personal interest in job security, a bias for eradication should be suspected, and appears apparent.

Note that the benefits of cattle egrets is completely ignored in this EA. One-sided arguments are not scientific, but propagandistic. The EA analysis of the cattle egret impact on the environment and native species is weak, short-sighted, biased, tainted with "beliefs" and lacking scientific evidence.

*Response: Lethal take is initiated after non-lethal control alone has been shown to be ineffective or unfeasible. Non-lethal attempts to control cattle egrets and barn owls include habitat alterations, changes in management practices, and hazing by humans and/or noise-making devices. Habitat alteration at nest or roost sites typically targets removal of roost or nest trees. This may be done on wildlife management areas, as it is consistent with habitat management for wetland birds and seabirds. However, not all nest and roost sites are located on public land and removing the appropriate structure(s) is often not possible. Furthermore, this technique does not resolve the depredation problem because cattle egrets and barn owls forage not only near nest or roost locations, but also frequently travel considerable distances to forage.*

*Management practices have been altered to the extent possible as another non-lethal approach. Wildlife managers have observed that cattle egrets are attracted to vegetation disturbance, such as that made by tractors and other heavy equipment. Cattle egrets follow the equipment and prey opportunistically upon waterbird chicks and other prey exposed or disturbed in the area where people are working. In response, managers have attempted to alter their management strategies by avoiding the use of heavy equipment during periods when chicks are most vulnerable. However, in Hawaii some species nest throughout the year, and chicks may be present throughout the year. This frequently makes changing management strategies inconsistent with habitat management goals. Further, once cattle egrets have learned that prey is available in an area, they return to forage even when the heavy equipment is no longer present. Active non-lethal techniques, such as hazing using noise making devices, can be an effective method in some circumstances. However, they are non-specific and disturb all wildlife, not just cattle egrets and barn owls. On wildlife management areas and other public lands, hazing disturbs the threatened and endangered species and other protected wildlife intended to be protected by dissuading cattle egrets and barn owls.*

*Trap and relocation of cattle egrets and/or barn owls was considered. These species cannot be relocated within the Hawaiian archipelago, as they are known to travel between islands and are likely to return, perpetuating the currently described conflict with threatened and endangered species. The Service made direct contact with the continental United States and provinces in Canada where populations of barn owls are locally endangered. As of publication of the final rule, no other locations or agencies have agreed to accept relocated birds. Additionally, the cost of trapping and relocating the barn owls and cattle egrets could substantially reduce other needed efforts to protect endangered or threatened species in Hawaii.*

*Sterilization was also proposed as an alternative to lethal take. However, sterilizing cattle egrets and barn owls does not stop them, in the short term, from, eating native wildlife. Further, the large costs for implementing birth control for these species, particularly on outlying islands in Hawaii, would reduce the funding available for more vital threatened and endangered species protection and restoration efforts.*

*Lethal take of problem individuals is a recognized, effective, and sometimes necessary tool in wildlife management. The use of lethal take does not reflect any individual preference for certain species. The Service works toward conservation of all species protected by the MBTA and the ESA, and only employs lethal take as a management strategy when it can be accomplished without causing*

*detrimental population-level effects to any protected species. All individuals and agencies participating in lethal take activities will be required to use humane methods of capture and euthanasia, and to adhere to the American Veterinary Medical Association Guidelines on euthanasia.*

#### 4. Some FACTS refuting the EA statements

Comment: According to the Global Invasive Species Database,

##### General impacts

"Cattle egrets are able to thrive in areas densely populated by other species, and this makes them potentially able to over-crowd and out-compete native birds for nesting areas. A number of articles point out however, that cattle egrets seem to have little or no impact on native bird species they live with. They are known to nest next to and amongst native birds with little or no observable conflict occurring (sic) ... " <http://www.issg.org/database/species/ecology.asp?si=970&fr=sss&lang=EN>

As for their diet, this database states, "They feed mostly on relatively large insects, especially grasshoppers, crickets, flies and moths as well as spiders, frogs, crayfish, earthworms, snakes and rarely also fish, birds eggs and even nestling birds." (Emphasis added)

The EA implies that the presence of cattle egrets in wetlands near airports might possibly create a vector situation for WNV transmission. Instead of that speculation, the FACT that cattle egrets eat SNAKES, which can accidentally be introduced at airports, especially from places like Guam and become established in wetlands, makes the cattle egret an important predator of snakes in the event of such an incident. Snakes would pose a far worse threat to all native and endangered water birds in Hawaii than the rare taking of native chicks by the egrets. This fact has been completely ignored in this EA.

*Response. The assertion that these species do not prey upon birds is incorrect. As presented in the EA, cattle egrets and barn owls have been documented preying upon threatened and endangered waterbirds and seabirds, including Hawaiian stilt, Hawaiian coot, Hawaiian common moorhen, Hawaiian duck, Hawaiian petrel, and Newell's shearwater. Hawaiian honeycreeper bones have also been found in owl pellets. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that*



*is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. Native birds, especially juvenile waterbirds and nesting seabirds are less mobile and easier to catch than rodents. Cattle egrets and barn owls that have learned to prey on avian species will continue to do so. Although cattle egrets and barn owls prey primarily on rodents and insects in their natural ranges, where they have been introduced to Hawaii they have adapted to the available prey base, which includes birds. As noted in the EA, cattle egrets and barn owls have become an increasing problem in efforts to protect and restore threatened and endangered species in Hawaii.*

*The potential effects of the control order were analyzed in two ESA Section 7 Consultations; one within the Service and one with the National Marine Fisheries Service. The conclusion of these Section 7 consultations was that this regulation is not likely to adversely affect any endangered or threatened species. There are best management practices that participating agencies will be required to follow in implementing the control order, to minimize effects to ESA-listed species, and the benefits of controlling these two invasive predators will far outweigh any detrimental effects of implementing the action.*

Comment: Additionally, cattle egrets are migratory birds, and can migrate thousands of miles. "They have strong migratory instincts and disperse thousands of miles in the direction of their choosing. They are, for the most part, self-introduced .... They are strongly migratory and juveniles may disperse thousands of miles in random directions (GSMFC, 2005)."

<http://www.issg.org/database/species/ecology.asp?si=970&fr=1&sts=sss&lang=EN> This means that cattle egrets from other parts of the world, where they are protected by migratory bird treaties, may be killed in Hawaii. Without knowing the origin of the birds, this may abrogate international laws on the treatment of migratory birds.

In addition, this control order is for non-native migratory birds. Since cattle egrets can migrate thousands of miles, their arrival in Hawaii and surrounding islands could be a natural process, unassisted by humans. This would make these individuals and their offspring native migratory birds, and distinguishing these from introduced individuals and their offspring would be impossible. The absence of these species within recent history is not proof that there had not been prior natural arrivals which, for some reason, have not survived into modern times. For example, cattle egrets may have existed in Hawaii over the past thousand years but were killed by native Hawaiians for their plumage or for some

other reason. Hence, the recent, 1950's introduction of cattle egrets may be a re-introduction of a native migratory species.

The assumption that cattle egrets are not native migratory birds in Hawaii is therefore speculative.

*Response: Regulation and management of barn owls and cattle egrets in the United States is the responsibility of the U.S. Fish and Wildlife Service. The Service operates under many directives. Many are from Congress, such as the National Environmental Policy Act, Migratory Bird Treaty Act, the Endangered Species Act, and the Wild Bird Conservation Act. Others are from the Executive Branch of the U.S. Government, such as Executive Orders or Secretarial Orders. In this case, cattle egrets and barn owls are protected under the Migratory Bird Treaty Act, but the Act also allows for take of protected species when responsible management dictates it is necessary. Killing birds protected under the Migratory Bird Treaty Act is illegal "Unless and except as permitted by regulations made as hereinafter provided in this subchapter" (16 U.S.C. 703(a)). Executive Order 13112 directs federal agencies to control populations of invasive species in a cost-effective and environmentally sound manner in order to minimize the effects of invasive species, including ecological effects. However, depredation permits and control orders are also issued when appropriate for native species. The intent of this Order is to provide a tool to allow removal of individuals and populations which have learned to prey on and specifically target Hawaii's threatened and endangered species.*

#### B. Barn Owls

Comment: Again, this EA has lots of anecdotal stories and personal communications about alleged barn owl predation of native birds, but no science.

For example, "Honeycreeper (Drepanididae spp.) bones have been found in a barn owl nest at Hakalau National Wildlife Refuge (N. Creps, pers. comm.)" (p. 11) Note this is one example of one barn owl on Hawaii Island.

"DOFA W personnel annually collect carcasses of adult Hawaiian petrels depredated by barn owls on Lana'i (F. Duvall, HDOFAW pers. comm.), and DOFAW personnel on Moloka'i have documented numerous instances of barn owl predation on Hawaiian stilts, including observations of predation upon adult Hawaiian stilts, along with at least one occasion of attempted predation on nene (*Branta*

*sandvicensis*) (A. Dibbon-Young, HOOFAW pers. comm.)." (p.11) Again, personal communication, and no research data.

"DOFAW personnel annually count Bulwer's petrel or 'ou (*Bulweria bulwerii*) carcasses on Kaohikaipu Island and find bones of Bulwer's petrels frequently on Popoia Island. There were 21 documented carcasses in the fall of 2011 and 42 carcasses in 2012 (A. Marie, DOFAW pers. comm.). The owl was assumed to have roosted on a nearby ironwood snag before preying on the bird as indicated by the presence of barn owl feathers under the tree. Predation may occur on other islets as well, but assessing (sic) to survey for carcasses is limited. " (p.12) Again, small amount of data and assumptions made without scientific verification.

Note in each case there is not one scientific study to confirm that these observations were correct. Given the small number of anecdotal observations, and given the large number of barn owls in Hawaii over a 60 year period, the actual predatory impact of owls on native birds may be extremely overstated.

That predation on native birds may be overstated is supported by the EA statement, "Stomach contents of 70 barn owls shot at Lihue Airport, Kauai, indicated a large number of crickets and grasshoppers in the diet; however, it has yet to be determined if these insects are indeed common or preferred prey in Hawaiian barn owls." (p. 11) Apparently, the dietary behavior of barn owls in Hawaii is not well understood.

*Response. The assertion that these species do not prey upon birds is incorrect. As presented in the EA, cattle egrets and barn owls have been documented preying upon threatened and endangered waterbirds and seabirds, including Hawaiian stilt, Hawaiian coot, Hawaiian common moorhen, Hawaiian duck, Hawaiian petrel, and Newell's shearwater. Hawaiian honeycreeper bones have also been found in owl pellets. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. Native birds, especially juvenile waterbirds and nesting seabirds are less mobile and easier to catch than rodents. Cattle egrets and barn owls that have learned to prey on avian species will continue to do so. Although cattle egrets and barn owls prey primarily on rodents and insects in their natural ranges, where they have been introduced to Hawaii they have adapted to the available prey base, which includes birds. As noted in the*

*EA, cattle egrets and barn owls have become an increasing problem in efforts to protect and restore threatened and endangered species in Hawaii.*

*As presented in the EA, credible, trained, educated scientific professionals have documented repeated occurrences of predation and response, including through remains, owl pellets, personal observations and photographs obtained with remote cameras. Predation has been documented since the 1970's on all the main Hawaiian Islands as well as on islands in the Northwestern Hawaiian Islands chain. In addition to expert and agency information, we did use available peer-reviewed literature, as noted in the Literature Cited section of the final EA. Regulations, such as control orders, are reevaluated as relevant research and information becomes available. In the event that new information becomes available, we will take that into consideration when we review this control order in the future.*

*In all scientific work there is some chance that an unknown variable has been introduced. In the interest of being fully transparent in our work, we acknowledge that chance by not using absolute terminology in our writing. We recognize that communicating that uncertainty can be unsettling, but it is consistent with the scientific approach.*

Comment: In addition, when owl predation is reasonable suspect, there is no proof that the species is the barn owl, and not the Hawaiian short-eared owl. The Hawaiian hawk is also capable of preying on other native birds, and such predation in the vicinity of barn owls may incorrectly be ascribed to the barn owl.

*Response: Many people confuse the Hawaiian short-eared owl , or pueo, with barn owls but there are distinct differences. The barn owl is slightly larger with lighter colored feathers and is active at dusk and through the night. Barn owls are known predators of seabirds, which are also active at night. The pueo is smaller and darker, and like other short-eared owls are territorial and active during the day. Wildlife managers are knowledgeable about characteristics differentiating the two species and likelihood of pueo detection is high. Barn owls have been documented in areas not occupied by pueo and have been photographed by remote cameras at seabird colonies*

Comment: It should be noted that barn owls are not listed as invasive species anywhere else in the world. They are protected.

*Response: Enactment of this control order does not remove the cattle egret or the barn owl from the list of species protected by the Migratory Bird Treaty Act. Neither does this ruling allow private citizens to capture, kill or harm cattle egrets or barn owls. Barn owls and cattle egrets and their parts, nests and eggs remain protected under federal law, and may not be taken or possessed without a federal permit. The provisions of the MBTA allow the federal government to issue permits or control orders in specific circumstances. The purpose of this control order is to comply with that requirement while easing the administrative burden on those agencies already charged with threatened and endangered species protection and invasive species control. Authorization to lethally take cattle egrets and barn owls without a permit will be restricted to agencies with authority and responsibility for managing wildlife and invasive species. Those authorized agencies are identified in the control order. The control order will not authorize lethal take of cattle egrets and barn owls by private citizens or by any group not specifically identified in the control order. Any individual not designated to act on behalf of one of the agencies specifically identified in the control order will not be allowed to take or possess cattle egrets or barn owls, their parts, nests or eggs without a federal permit. Doing so without the necessary authorization is a violation of the MBTA.*

*Lethal take of cattle egrets and barn owls will only be authorized in Hawaii where both species are considered invasive. Cattle egrets and barn owls have substantial populations where they naturally exist, and this rule does not authorize lethal take in those areas.*

Comment: In addition, while barn owls are known predators of birds, they are also predators of snakes, rodents, and other predators of birds. Like cattle egrets, they offer some benefits, in addition to some problems. Clearly, the overall impact of the presence of these species in Hawaii is complex. Rodent and snake predation by owls and cattle egrets is highly beneficial for all bird species, and in some cases may actually save endangered [sic] species from harm from these pests. However, without any scientific studies that examine this harm/benefit ratio, the USFWS has no scientific basis for issuing this control orders for cattle egrets and barn owls.

*Response: The Service recognizes that the barn owl and cattle egret have value to many people. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. As explained in the EA, populations of other invasive species such as rats, mice and coqui in Hawaii have spread independently of, and in spite of, the presence of barn owls or cattle egrets. Conversely, threatened and endangered seabird and waterbird populations are*

*being adversely impacted by barn owls and cattle egrets. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. Native birds, especially juvenile waterbirds and nesting seabirds are less mobile and easier to catch than rodents. Cattle egrets and barn owls that have learned to prey on avian species will continue to do so.*

*The potential effects of the control order were analyzed in two ESA Section 7 Consultations; one within the Service and one with the National Marine Fisheries Service. The conclusion of these Section 7 consultations was that this regulation is not likely to adversely affect any endangered or threatened species. There are best management practices that participating agencies will be required to follow in implementing the control order, to minimize effects to ESA-listed species, and the benefits of controlling these two invasive predators will far outweigh any detrimental effects of implementing the action.*

#### C. Violation of Executive Order 13186

Comment: 1.5.3 Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds (66 FR 3853, Jan. 17, 2001)

"This Executive Order requires federal agencies, to the extent practicable, to avoid or minimize adverse impacts on migratory bird resources when conducting agency actions, and to restore and enhance the habitat of migratory birds. Specifically, it requires federal agencies to develop and use principles, standards, and practices that will lessen the amount of unintentional take reasonably attributed to agency actions. The proposed action, through its standards for incorporation of measures to reduce take of migratory birds, would be consistent with the goals of this Executive Order."

At least some of these birds may have arrived in Hawaii on their own, making them native migratory birds and not introduced. According to the EA, This Control Order is "to allow control of cattle egrets and barn owls without a permit in any location in which the species does not occur naturally in the state of Hawai'i, the Northwestern Hawaiian Islands and the unincorporated territory of Midway Atoll." Given the migratory nature of these birds, there is no method mentioned in the EA by which to determine which individuals and their offspring had migrated naturally to these areas, as oppose [sic] to having been introduced. Cattle egrets, for example, can migrate thousands of miles, hence the arrival of individuals by natural means, without human assistance, is possible.

Such individuals should be considered native migratory birds to Hawaii, exempting them from this control order. How such a distinction will be made between naturally arriving individuals and their offspring and those arriving by human assistance is completely ignored in this control order and EA, and the taking of such individuals would be in violation of the law, including Migratory Bird treaties and Executive Order 13186.

Without considering the positive impact of barn owls and cattle egrets on the environment, e.g., their predation on snakes, rats, mongooses, and other predators of endangered birds, this order would violate Executive Order 13186 by needlessly taking barn owls and cattle egrets.

*Response: Regulation and management of barn owls and cattle egrets in the United States is the responsibility of the U.S. Fish and Wildlife Service. The Service operates under many directives. Many are from Congress, such as the National Environmental Policy Act, Migratory Bird Treaty Act, the Endangered Species Act, and the Wild Bird Conservation Act. Others are from the Executive Branch of the U.S. Government, such as Executive Orders or Secretarial Orders. In this case, cattle egrets and barn owls are protected under the Migratory Bird Treaty Act, but the Act also allows for take of protected species when responsible management dictates the necessity of doing so. Killing birds protected under the Migratory Bird Treaty Act is illegal "Unless and except as permitted by regulations made as hereinafter provided in this subchapter" (16 U.S.C. 703(a)). Executive Order 13112 directs federal agencies to control populations of invasive species in a cost-effective and environmentally sound manner in order to minimize the effects of invasive species, including ecological effects*

*We achieve this primarily through regulations describing depredation and control orders. In most circumstances, a permit is necessary to legally take or possess a species protected by the MBTA. However, for MBTA species subject to control or depredation orders, an individual specifically authorized by the order may take or possess that species without a federal permit, so long as the regulatory requirements and restrictions of the order are complied with.*

*At the time of this writing there are thirteen depredation and control orders authorized under the Migratory Bird Treaty Act. Each order is assigned its own number, starting with 50 CFR Section 21.42, to Section 21.54. Nine of these orders are for a single species, one is for two species, and three are for multiple species. Two of these orders apply only in a specific state, one is for two states, three are*

*for a described region of the United States, and seven authorize take nationwide. Six control orders were created to protect multiple agriculture, aquaculture or horticulture interests; two are for a specific crop or specific type of crop; four are for protection of human health, one is to protect personal property; two are for protection of fish, wildlife, native plants and their habitats, and two allow take to alleviate any type of nuisance. This rule will create a new control order at 50 CFR Section 21.55 authorizing lethal take of two nongame species in a specified geographic region for the protection of threatened and endangered wildlife resources.*

Comment: Without any scientific analysis of the benefits of these species to Hawaii's environment and native species, this order may not help endangered native birds, and may in some cases harm them.

*Response: The potential effects of the control order were analyzed in two ESA Section 7 Consultations; one within the Service and one with the National Marine Fisheries Service. The conclusion of these Section 7 consultations was that this regulation is not likely to adversely affect any endangered or threatened species. There are best management practices that participating agencies will be required to follow in implementing the control order, to minimize effects to ESA-listed species, and the benefits of controlling these two invasive predators will far outweigh any detrimental effects of implementing the action.*

Comment: As an analogy, I offer the following. Guns kill people. Should we ban (eradicate) guns to save people? Using the approach in this EA, guns would be eliminated to preserve human life. However, guns also protect people from human predators and can, in some situations, save lives. To just argue one side without the other is not sound policy. Hence, while cattle egrets and barn owls may kill some endangered birds directly, they may help others indirectly by killing bird predators, some of which pose a nightmare scenario for Hawaii, such as snakes.

The EA states, "The most important causes of decline for Hawaiian waterbirds are loss and degradation of habitat and predation by invasive animals." (p. 25) Cattle egrets and barn owls are predators of invasive animals, and thereby help Hawaiian waterbirds. Further, the loss and degradation of habitat, including pesticide runoff, are much greater threats to these waterbirds, although, given the lack of scientific investigation into this issue, the relative contribution of each of these factors is not known. Consequently, given this ignorance, the USFWS cannot be certain that eradication of cattle egrets and



barn owls will do any good to Hawaii's waterbirds. The only thing that will be certain is that someone will be making money killing egrets and owls.

*Response: We agree that other introduced species and environmental factors threaten native species in Hawaii. Multiple factors must be incorporated into an effective conservation strategy. Where it has the authority to do so, the Service seeks to implement actions to assist in the recovery of threatened or endangered species and the conservation of other protected wildlife. The Service works cooperatively with multiple entities on actions such as constructing predator-proof fencing, protecting and restoring wildlife habitat, researching disease, and engaging in predator control whenever possible. The Service can lethally take other predators, such as mongooses and cats, on Service lands and is supportive of predator management as allowed elsewhere in Hawaii. We agree that predator control without adequate habitat protection measures will not be effective in conserving and restoring threatened and endangered species. Likewise, habitat conservation alone without adequate predator control will not be effective in conserving and restoring populations of threatened and endangered species. Lethal take of cattle egrets and barn owls in Hawaii is just one part of the Service's efforts to meet its various obligations – including protection and restoration of threatened and endangered species populations and habitat, protection of native migratory bird species, and management of National Wildlife Refuges.*

D. The EA admits the USFWS ignorance

Comment: "Impacts of alien birds are not well understood, but include aggressive behavior towards native bird species, possible competition for food, nest sites, and roosting sites, possibly supporting elevated predator population levels, and potential disease introduction and transmission. The importance of predation in limiting forest bird populations is not clear. However, depredation of eggs and predation of nestlings and adults by rats, cats, mongooses, and owls is suspected to have a significant impact on many native Hawaiian bird species". (p.27) That owls eat rats, cats, and mongooses suggests a protective function of owls, which other people in the world already know.

For example, according to Wikipedia, "In May 2012 it was revealed that farmers in Israel and Jordan had been using barn owls, instead of pesticides, to deal with mice and rats for the previous ten years as part of a joint conservation venture called Project Barn Owl.[30]" [http://en.wikipedia.org/wiki/Barn\\_Owl](http://en.wikipedia.org/wiki/Barn_Owl)

Rats constitute a huge threat to all birds, and rat reductions have been shown to revive island bird populations. It follows that owls may serve a beneficial function for native bird survival as rat predators, outweighing their predation of native birds.

From the EA, (p. 30) "Nearly all studies that have investigated predator-prey relationships have concluded that predators exert a controlling influence on their prey populations only under rare circumstances, such as when prey populations are already at very low densities and alternative prey are scarce or absent." While this statement is meant to apply to the owl-rodent predator-prey relationship, it should also apply to bird-bird predator-prey relationships. This would suggest owls are not impacting endangered populations. While the latter are very low density, other prey is readily available. The EA continues, "More commonly, the presence of high rodent or other prey populations attracts and sustains predators which relocate when those prey animals become more difficult to find and capture. Thus, except under extremely rare conditions, predators do not hunt their prey to the low levels required for effective population management of rodent species and do not result in population eradication (Tobin and Fa/12005}." Applying this logic to the impact of egrets and owls on endangered birds, it follows that any predation would be minimal. This is supported by the Global Invasive Species Database information about cattle egrets cited above, that found little impact on native species by cattle egrets.

*Response: As presented in the EA, credible, trained, educated scientific professionals have documented repeated occurrences of predation and response, including through remains, owl pellets, personal observations and photographs obtained with remote cameras. Predation has been documented since the 1970's on all the main Hawaiian Islands as well as on islands in the Northwestern Hawaiian Islands chain. In addition to expert and agency information, we did use available peer-reviewed literature, as noted in the Literature Cited section of the final EA. Regulations, such as control orders, are reevaluated as relevant research and information becomes available. In the event that new information becomes available, we will take that into consideration when we review this control order in the future.*

*In all scientific work there is some chance that an unknown variable has been introduced. In the interest of being fully transparent in our work, we acknowledge that chance by not using absolute terminology in our writing. We recognize that communicating that uncertainty can be unsettling, but it is consistent with the scientific approach.*

#### E. Poor Scoping and Public Participation

Comment: "We solicited comments on an internal draft of the DEA from other programs within the Service, and from DOFAW, USDA APHIS Wildlife Services and USGS National Wildlife Health Center, Honolulu Field Station." Comments were not solicited from property owners who have cattle egrets and/or barn owls on their property. The EA for the destruction of barred owls in the Pacific Northwest to save the spotted owl was a 505 page document, and an ethics review was conducted to consider the cultural and moral impacts of killing owls, which are protected and admired by most people. Here in Hawaii, there is this short EA, less than 40 pages, with no scientific studies, no ethical review, and little public notice. The comment period coincides with Christmas season, when people are not available for commenting. Little media attention kept this issue from public scrutiny. This is poor public participation. The comment period should be extended for this EA to account for the time of year it was released, and an EIS should address the ethical issues and reach out to other stakeholders, including ranchers and other property owners.

*Response: This decision has been thoroughly considered, incorporating the best available science as well as the perspectives of the public. Predation has been documented since the 1970's on all the main Hawaiian Islands as well as on islands in the Northwestern Hawaiian Islands chain. The proposed rule and the supporting draft environmental assessment explained our intent. We published our proposal in the Federal Register and allowed three months for public comment. The problems created by cattle egrets and barn owls have been well documented and are analyzed in the environmental assessment.*

#### F. Inadequate Assessment of Cultural Impacts

Comment: "The Hawaiian short-eared owl, or pueo, is considered by many Hawaiians to be aumakua, or ancestral guardian spirits. Barn owls compete with pueo for limited food resources and are potential vectors of parasites and disease. Seabirds and waterbirds also hold high cultural value for native Hawaiians. For example, the Hawaiian common moorhen is believed to have brought fire to the people of Hawai'i, and seabirds and waterbirds are common in native lore. Additionally, there are numerous olelo no'eau, or Hawaiian proverbs and poetical sayings, pertaining to birds that are known to be preyed upon by barn owls and cattle egrets. In protecting the native birds this control order would also be protecting these important facets of the cultural and biological history of the Hawaiian Islands. "

This interpretation of Hawaiian cultural respect for native birds was not explored with any native Hawaiian practitioners or other cultural experts. Hawaiian cultural respect for the Hawaiian short-eared owl may extend to other owls, including the barn owl. As an anthropologist, I find the lack of cultural analysis shocking. Are barn owls not considered to be aumakua? All birds may have cultural significance for Hawaiian culture. The Hawaiian culture may not be as prejudiced against these migratory birds as the USFWS assumes. In addition, despite best management practices, at least some nontarget deaths of pueo, other native birds, and bats are likely. This poses a real threat to these aumakua, and may be perceived as extremely disrespectful by native Hawaiians. Without a cultural assessment, as required by an EIS, the cultural impacts of this proposed rule are pure speculation.

*Response: Hawaiian cultural practices have been considered in writing this rule. Many of the individuals who assisted in writing the control order and EA are practitioners of traditional Hawaiian culture as well as employed in environmental fields. It is possible that some people confuse the barn owl, which has only occurred in Hawaii since the late 1950's, with the native pueo, or Hawaiian short-eared owl, which has existed in Hawaii throughout human history and is honored in Hawaiian culture. We agree that many people may find pleasure in seeing the two invasive species. However, Native Hawaiian birds are and have always been an integral part of daily life and cultural significance to Hawaiians. The primary purpose of this control order is to protect native seabirds and waterbirds. Historically, seabirds were used by Hawaiians to navigate back to land from fishing or trading voyages and to lead fishermen to schools of fish, as well as being a source of food and feathers. Waterbirds were also of great importance. In Hawaiian mythology, a moorhen brought fire to humans, which explains the red on its forehead, a symbol of the scorching from the fire. The Hawaiian coot and Hawaiian moorhen are sacred to Hina, a Hawaiian Earth-mother category of goddess who can take the form of these birds. The eggs of these birds were traditionally used in ceremonies to consecrate chiefs and priests. The Hawaiian Stilt is sacred to the Hawaiian god Ku, in his form as a fisherman. These birds are a culturally significant and endangered resource. They are being preyed upon by invasive cattle egrets and barn owls. Lethal take of the two invasive species is much needed in Hawaii for protection of the native bird species, including threatened and endangered species, not only for their own sake, but also to protect cultural practices.*

#### G. Legal Issues

Comment: In addition to the Hawaiian cultural impacts, there are other cultural impacts relating to property rights. Attracting barn owls from private property is a “taking” and is protected by Hawaii and US Constitutional law.

According to the Hawaii Constitution, Article 1, Bill of Rights:

## 1. DUE PROCESS AND EQUAL PROTECTION

Section 5. No person shall be deprived of life, liberty or property without due process of law, nor be denied the equal protection of the laws, nor be denied the enjoyment of the person’s civil rights or be discriminated against in the exercise thereof because of race, religion, sex or ancestry. [Ren and am Const Con 1978 and election Nov 7, 1978]

Resident barn owls and cattle egrets on private property are the property of the landowner. Private property owners deprived of these birds by eradication methods that attract these birds away from private property deprives the property owner of these birds without due process, in violation of this Section. (U.S. Constitution protects due process under Article V of the Bill of Rights.)

*Response: Birds federally protected by the Migratory Bird Treaty Act, including barn owls and cattle egrets, are under federal jurisdiction wherever they occur, even on private property. However, this regulation does not grant access to or on private property. This control order requires landowner permission for employees or agents of the authorized agencies to enter private property for the purpose of capturing or killing cattle egrets or barn owls.*

## 2. EMINENT DOMAIN

Comment: Section 20. Private property shall not be taken or damaged for public use without just compensation. [Am Const Con 1968 and election Nov 5, 1968; ren Const Con 1978 and election Nov 7, 1978]

The proposed rules constitute an eminent domain "taking" of privately owned barn owls and egrets. These birds provide valuable pest control and aesthetics services. For example, barn owls are used for rodent control, and owls and cattle egrets fulfill important ecosystem functions. Where barn owls have filled niches once occupied by native Hawaiian owls, they provide similar environmental services as the

native species had provided. The health of ecosystems is maintained in part by the important rodent control services of owls. Loss of owls on private property can adversely impact the property. In addition, the loss of barn owls and cattle egrets reduces the enjoyment of wildlife and one's property. On my own property, which is a 70-acre nature preserve in Puna on the Big Island, tourists are attracted to the wildlife and are awed by the beauty and majesty of barn owls that are resident here. Loss of this attraction will have economic impacts in addition to intangible losses.

The EA has not attempted to quantify what this "taking" of egrets and owls on private property will cost property owners. No special outreach has been made to property owners with egrets and owls to assess this issue. This requires an EIS, since the State and Federal governments will need to compensate property owners for these losses, according to State and Federal Constitutions. (U.S. Constitution addressed Eminent Domain under Article V of the Bill of Rights.)

*Response: Birds federally protected by the Migratory Bird Treaty Act, including barn owls and cattle egrets, are under federal jurisdiction wherever they occur, even on private property. However, this regulation does not grant access to or on private property. This control order requires landowner permission for employees or agents of the authorized agencies to enter private property for the purpose of capturing or killing cattle egrets or barn owls.*

*The introduction of invasive species can have a dramatic effect on our natural resources, human health, and economy. The reason for this is that in a natural or native community, species evolve together into an ecosystem with many checks and balances that limit the population growth of any one species. Controlling influences include such things as: predators, herbivores, diseases, parasites, and other organisms competing for the same resources and limiting environmental factors. These checks and balances form the complex web of life that makes up an ecosystem and in which a native species competes for survival. However, when an organism is introduced into an ecosystem in which it did not evolve naturally, it no longer has those limits and its numbers can sometimes dramatically increase. The unnaturally large population numbers can then have severe effects as they prey upon, compete with and displace native species. This does not lead to new balance, rather it increases imbalance in the natural environment.*

### 3. LIMITATIONS OF SPECIAL PRIVILEGES

Comment: Section 21. The power of the State to act in the general welfare shall never be impaired by the making of any irrevocable grant of special privileges or immunities. [Ren and am Const Con 1978 and election Nov 7, 1978]

The proposed rule change will create an open season on these bird species, impairing the power of the State to protect private property.

*Response: \_Enactment of this control order does not remove the cattle egret or the barn owl from the list of species protected by the Migratory Bird Treaty Act. Neither does this ruling allow private citizens to capture, kill or harm cattle egrets or barn owls. Barn owls and cattle egrets and their parts, nests and eggs remain protected under federal law, and may not be taken or possessed without a federal permit. The provisions of the MBTA allow the federal government to issue permits or control orders in specific circumstances. The purpose of this control order is to comply with that requirement while easing the administrative burden on those agencies already charged with threatened and endangered species protection and invasive species control. Authorization to lethally take cattle egrets and barn owls without a permit will be restricted to agencies with authority and responsibility for managing wildlife and invasive species. Those authorized agencies are identified in the control order. Lethal take of cattle egrets and barn owls will not be allowed by private citizens or by any group not specifically identified in the control order. Any individual not designated to act on behalf of one of the agencies specifically identified in the control order will not be allowed to take or possess cattle egrets or barn owls, their parts, nests or eggs without a federal permit. Doing so without the necessary authorization is a violation of the MBTA.*

*Lethal take of cattle egrets and barn owls will only be authorized in Hawaii where both species are considered invasive. Cattle egrets and barn owls have substantial populations where they naturally exist, and this rule does not authorize lethal take in those areas.*

*Birds federally protected by the Migratory Bird Treaty Act, including barn owls and cattle egrets, are under federal jurisdiction wherever they occur, even on private property. However, this regulation does not grant access to or on private property. This control order requires landowner permission for employees or agents of the authorized agencies to enter private property for the purpose of capturing or killing cattle egrets or barn owls. The power of the State to protect private property is not impacted.*

#### 4. Article XI Hawaii Constitution

##### ENVIRONMENTAL RIGHTS

Comment: Section 9. Each person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural resources. Any person may enforce this right against any party, public or private, through appropriate legal proceedings, subject to reasonable limitations and regulation as provided by law. [Add Const Con 1978 and election Nov 7, 1978]

Barn owls provide the important service of rodent control. Rodents pose a significant threat to public health as vectors of disease. I personally live on a nature preserve and rely on catchment water where rodents pose a serious threat to water quality and human health. Rodents also fouls food stuffs and pose a health threat to our pets. We hear barn owls nightly and see rodent scat from these owls on our fields. Loss of this important rodent control service increases our risk of rodent-caused illness. The use of chemical rodenticides is not a practical or desirable alternative given the animal populations with which we live. Killing of barn owls will therefore deprive us of a healthy and clean environment.

In addition, our barn owls constitute a natural resource in our local environment. We have a right to protect these owls as natural resources.

*Response: The Service recognizes that the barn owl and cattle egret have value to many people. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. As explained in the EA, populations of other invasive species such as rats, mice and coqui in Hawaii have spread independently of, and in spite of, the presence of barn owls or cattle egrets. Conversely, threatened and endangered seabird and waterbird populations are being adversely impacted by barn owls and cattle egrets. Cattle egrets and barn owls are opportunistic predators and preferentially choose the prey that is easiest to capture. Once a bird learns foraging strategies that are successful, it will continue to seek out similar opportunities until that foraging strategy stops being successful. Native birds, especially juvenile waterbirds and nesting seabirds are less mobile and easier to catch than rodents. Cattle egrets and barn owls that have learned to prey on avian species will continue to do so.*



*Cattle egret and barn owl do not protect humans against diseases and parasites. According to the Hawaii Department of Health, rat lungworm disease is spread to humans through ingestion of slugs on unwashed produce. Practicing hygienic food preparation is the best defense against lungworm, regardless of location. Leptospirosis is spread in soil or fresh water contaminated by any infected mammal, including domestic livestock and pets. A 10-year study conducted in Hawaii from 1999-2008 documented an average leptospirosis case rate of 1.63 people per 100,000 per year. Information on preventing and recognizing both rat lungworm disease and leptospirosis is available through the Hawaii Department of Health and summarized in the following online brochures:*

<http://health.hawaii.gov/san/files/2013/06/ratlungworm-bulletin.pdf>

<http://hawaii.gov/health/about/reports/leptobrochure.pdf>

Comment: 5. The proposed rule will violate US Constitution Bill of Rights, including the First, Fourth, Fifth, Ninth, and Tenth Amendments.

*Response: This statement is incorrect. Enactment of this regulation does not violate the U.S. Constitution Bill of Rights.*

Comment: 6. There needs to be an Environmental Assessment for this proposed rule under HEPA. Hawaii Revised Statutes 343, since this involves state agencies. state land, state natural resources, and state funds.

*Response: This is a federal regulation under the provisions of the MBTA. No review by the State of Hawaii is required for the federal government to implement this regulation. However, the State of Hawaii supports this regulation and is a cooperating agency on the Environmental Assessment.*

Comment: H. Literature Cited –NONE

This is a big problem. No science. No data. Just speculation, hearsay, and personal communications.

*Response: There is a literature cited section available in the Final Environmental Assessment.*

Comment: Conclusion: This EA is inadequate in assessing the impacts of this proposed control order for cattle egrets and barn owls. It is devoid of scientific and cultural assessments. The property rights

impacts of "taking" these birds from property owners has been completely ignored. These need to be addressed in an EIS.

In addition, there are only 2 alternatives addressed, namely no action and adopting this rule. A third alternative is conducting some real research to assess the impact that these introduced species are actually having on endangered and native species prior to conducting any further eradication campaign. The complexities of the food web impact of generalist predators such as these requires real research, not just he resay anecdotes. These birds rarely prey on native species, and frequently prey on invasive species. The cumulative impact of this may prove beneficial in the "big picture" for native and endangered species.

This Third Alternative would allow current permit dependent taking of these birds where individuals clearly pose a threat to endangered species, as is now done. However, it would add to the current Alternative One the performance of actual research on a landscape scale to determine the overall impact of these introduced bird species on endangered and native species and ecosystems. Given the complexities of ecosystem dynamics, especially with numerous pest species such as rats and mongooses, action should not be taken on a landscape scale until landscape impacts are scientifically determined. This Alternative would encourage interagency cooperation in gathering data on these impacts, while not forgoing current local level protection, which, according the the Hawaii DOFAW, is working. (Personal comm.)

In summary, this EA is inadequate. An EIS is required. In addition, a State of Hawaii EA under HEPA must be prepared to be in compliance with HRS 343.

*Response: This decision has been thoroughly considered, incorporating the best available science as well as the perspectives of the public. Predation has been documented since the 1970's on all the main Hawaiian Islands as well as on islands in the Northwestern Hawaiian Islands chain. The proposed rule and the supporting draft environmental assessment explained our intent. We published our proposal in the Federal Register and allowed three months for public comment. The problems created by cattle egrets and barn owls have been well documented and are analyzed in the environmental assessment.*

*Birds federally protected by the Migratory Bird Treaty Act, including barn owls and cattle egrets, are under federal jurisdiction wherever they occur, even on private property. However, this regulation*

*does not grant access to or on private property. This control order requires landowner permission for employees or agents of the authorized agencies to enter private property for the purpose of capturing or killing cattle egrets or barn owls. The power of the State to protect private property is not impacted.*

*The assertion that continuing to issue depredation permits was not considered as an alternative is false. Continuing to issue depredation permits is the No Action alternative analyzed in the EA. As explained in the EA, other alternatives were considered but excluded from analysis because they would not accomplish the needed objectives.*

*This is a federal regulation under the provisions of the MBTA. No review by the State of Hawaii is required for the federal government to implement this regulation. However, the State of Hawaii supports this regulation and is a cooperating agency on the Environmental Assessment.*

*Department of Interior regulations state "The purpose of an environmental assessment is to allow the Responsible Official to determine whether to prepare an environmental impact statement or a finding of no significant impact (43 CFR 46.300). We stated in a finding of no significant impact (FONSI) that "implementation of [this regulatory change] does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). We stand by this conclusion. This action will have no significant environmental effects other than the desired effect of reduced populations of the two invasive species and reduced predation on threatened and endangered species. An Environmental Impact Statement for this action is not warranted.*

Thank you for your consideration of these comments. Please notify me of your decision.  
Mahalo.

Sincerely,  
Sydney Ross Singer  
Director, Good Shepherd Foundation

**8. NGO\_8 Submitter Name: Hawaiian Humane Society**

**Docket No: FWS-HQ-MB-2013-0070-0033**

**Date Received: 1/6/2014**

Comment:

January 3, 2014

Fish and Wildlife Service

RE:Migratory Bird Permit Control Order for Introduced Migratory Bird Species in Hawaii

Docket #: FWS-HQ-MB-2013-0070

On behalf of the Hawaiian Humane Society I would like to thank you for accepting our comments on the proposed rule change referenced above.

This proposal calls for the elimination of cattle egrets and barn animals as a means of controlling invasive species and purports to giving native and/or endangered species an opportunity to thrive. We are not in a position to evaluate the reasonableness or effectiveness of this proposal since no quantitative measures of the action are provided. The Hawaiian Humane Society does not assign a higher value to one animal/bird species over another. However, we understand the intent of the proposed rule and as long as the reasoning for implementation is well thought out and the methods of elimination are undertaken in a humane manner we will not oppose the proposal.

We would like to participate and comment on future proposed rule changes as they effect animal welfare. Please refer correspondence to Mary Steiner, Policy Advocate for the Hawaiian Humane Society. Mary can be contacted at this address or by email: [msteiner@hawaiianhumane.org](mailto:msteiner@hawaiianhumane.org).

If you have any questions please feel free to contact either Mary or me.

Sincerely,

Pamela Burns

President & CEO

*Response: Thank you for your comment. As presented in the EA, credible, trained, educated scientific professionals have documented repeated occurrences of predation and response, including through examination of remains owl pellets, personal observations and photographs obtained with remote cameras. Predation has been documented since the 1970's on all the main Hawaiian Islands as well as on islands in the Northwestern Hawaiian Islands chain. In addition to expert and agency information, we did use available peer-reviewed literature, as noted in the Literature Cited section of the final EA.*

*Regulations, such as control orders, are reevaluated as relevant research and information becomes available. In the event that new information becomes available, we will take that into consideration when we review this control order in the future. The information used in writing the Environmental Assessment is identified in the literature cited section of the Final EA. These pages were inadvertently truncated in publication of the Draft EA.*

*Lethal take of problem individuals is a recognized, effective, and sometimes necessary tool in wildlife management. The use of lethal take does not reflect any individual preference for certain species. The Service works toward conservation of all species protected by the MBTA and the ESA, and only employs lethal take as a management strategy when it can be accomplished without causing detrimental population-level effects to any protected species. All individuals and agencies participating in lethal take activities will be required to use humane methods of capture and euthanasia, and to adhere to the American Veterinary Medical Association Guidelines on euthanasia.*

**9. NGO\_9 Submitter Name: Hawaii Wildlife Fund**

**Docket No: FWS-HQ-MB-2013-0070-0116      Date Received: 2/3/2014**

Comment: Thank you for this opportunity to comment on the Proposed Rule: *Migratory Bird Permits; Control Order for Introduced Migratory Bird Species in Hawaii*. We support the action by the U.S. Fish and Wildlife Service to control nonnative species in Hawai'i that have detrimental effects on native species. Cattle Egrets have been documented preying upon native bird species, especially the threatened and endangered waterbirds. Barn Owls are known to prey upon native seabirds which are active at night, including the threatened and endangered 'A'o and 'Ua'u. This proposed control order will facilitate the responsible control of these species and support efforts to protect native species in Hawai'i.

*Response: Thank you for your comment. We agree.*

**10. NGO\_10 Submitter Name: Malama O Puna**

**Docket No: FWS-HQ-MB-2013-0070-0080      Date Received: 1/29/2014**

Comment: I fully support this control order for cattle egrets and barn owls. The value of our endangered, endemic bird species is far greater than the value of these alien species that are very widespread throughout the world and were introduced to Hawai'i without careful consideration of their potential effects. In addition to preying upon the chicks of our endangered shorebirds, the barn owl and cattle egret compete with the native owl, pueo, and the native night heron, 'auku'u, respectively. While the 'auku'u is itself somewhat of a menace to endangered shorebirds and nene by eating their chicks, I observed a large flock of cattle egrets displacing an 'auku'u rookery in Kona. There are many emotional comments against this order, and I am sure that more people would be supporting the order if they had an emotional connection with the pueo. Unfortunately, most of the commenters have probably never seen this rare native owl. In my community, many people think the barn owl is the pueo, because they have heard about the native owl but have never seen one. Let's give them a better chance to experience the pueo.

*Response: Thank you for your comments. We agree.*

**11. NGO\_11 Submitter Name: Sierra Club, Hilo, HI**

**Docket No: FWS-HQ-MB-2013-0070-0091      Date Received: 1/31/2014**

Comment: We support adding a control order to 50CFR part 21 to assist with control of cattle egrets and barn owls.

They were introduced to control pests, but the Draft Environmental Assessment states:

“No measurable decline in rodent or horn fly populations has been associated with cattle egret or barn owl populations. Both cattle egrets and barn owls have been documented to prey upon native species, including waterbird and seabird species listed as threatened or endangered under the Endangered Species Act (ESA), and to compete with native species for food resources.” [p. 3]

and

“Several near collisions and aborted landings have occurred at General Lyman Field (GLF) in Hilo as a result of cattle egrets that nest and roost at Loko Waka Pond, often flying over and congregating to feed at or near the airport. Threats to aviation have also occurred at the Honolulu (O'ahu), Kahului (Maui) and Lihue (Kaua'i) airports.” [p. 8]

and

“Attempts have been made to control cattle egrets and barn owls through site-specific permits, but these permits are limited in scope and applicability, and have proven to have limited success in controlling the impacts that these two invasive predators have on native species... Removal is only feasible through a coordinated effort facilitated by a control order, and is necessary for recovery of threatened and endangered Hawaiian waterbirds and seabirds.” [pp. 38-39]

Please approve the control order. Thank you for your attention to our comments.

*Response: Thank you for your comments. We agree. While cattle egrets and barn owls were brought to the Hawaiian Islands with good intent, they do not serve the purpose for which they were released. Introduced predators negatively impact native Hawaiian ecosystems and steps must be implemented to control these effects. The Environmental Assessment illustrates the need for action and provides the information used to reach this decision. Publication of this Control Order will support efforts by federal and state agencies to protect native Hawaiian birds by enhancing the current, less effective, system of issuing individual permits.*